ADMINISTRATION REPORTS

OF THE

FOREST DEPARTMENT

IN THE

133269

BOMBAY PRESIDENCY,

INCLUDING

SIND

FOR THE YEAR 1892-93. to 1894-95

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NORTHERN CIRCLE.

INDEX.

FOREST ADMINISTRATION REPORT, NORTHERN CIRCLE, FOR 1892-93.

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FOREST ADMINISTRATION REPORT

OF THE

NORTHERN CIRCLE, BOMBAY PRESIDENCY,

FOR THE OFFICIAL YEAR 1892-93.

INTRODUCTION.

This is the first Annual Report submitted for the new Northern Circle, and a few statistics and general observations will not, on this occasion, be out of place in the introductory chapter.

2. The Bombay Presidency proper was for forest administrative purposes divided into three Circles, corresponding with the three Revenue Divisions, during the year, and the additional Circle thus formed was placed in independent charge of a Deputy Conservator. A permanent distribution of Imperial and Provincial officers and of establishments between the three Circles has not been made yet, and the distribution of officers and subordinates which existed at the time of the separation of the Circles continues, with the exception of an establishment of three clerks and two peons belonging to the old Northern Circle being seconded for duty in the new Circle.

3. The Northern Circle is formed of the three districts of Panch Maháls, Surat and Thána. The first two are in Gujarát and the last in the Konkan. The forests of the Dángs, which for political purposes are under the Central Division, continue to be administered through the Divisional Forest Officer, Surat. With this exception the forest divisional charges coincide with the fiscal divisions; the Thána forests, however, being under the management and control of two Divisional Officers.

4. The total area of country in which the forests are situated is 7,870 square miles. The population according to the last census returns is 1,901,194 souls, showing an average of 241·57 per square mile. Excluding places with a population of less than 4,000 souls each, there are 17 towns distributed thus among the forest divisions:—

Division.	No.	Name of Town.	Population according to Census of 1891.
East and West Thána	1	Bándra	18,317
	2	Thána	17,455
	3	Bhiwndi	14,387
	4	Kalyán	12,608
	5	Kurla	11,469
	6	Bassein	11,291
	7	Agáshi	7,538
	8	Máhim	6,960
		Total	100,025
Surat	1	Surat	109,229
	2	Bulsár	14,779
	3	Ránder	10,926
	4	Párdi	4,686
	5	Bárdoli	4,278
	6	Chikhli	4,041
		Total	147,939
Panch Maháls	1	Godhra	14,691
	2	Dohad	12,935
	3	Jhálod	5,991
	4	Kálol	4,464
		Total	38,081

5. The forest area administered in the Northern Circle measures approximately 2,233 square miles. This represents 28·37 per cent. of the total area of the districts in which it is situated and a little over three quarters of an acre per head of population. There is, in addition, a wide area of forest land held by the Gáikwár of Baroda, the Portuguese Government, the Rájás of Dharampor, Bánsda and Jawhár, and the Rewa Kántha and Rájpipla Chiefs, who are commencing to recognize the importance of forest conservancy, and a few of them are endeavouring to work their forests systematically.

6. The manner in which forests in foreign territory are mixed up with Government forests render the management of the latter at times difficult, but it does not interfere with the sale of their products to the extent, one would suppose, owing to the facilities offered for export to the Bombay and other markets.

7. The area of reserved forests was increased by 14,124 acres by settlement and decreased by 368 acres. It is hoped that, as a good start has now been made, the forest settlement and demarcation work remaining to be done will be completed in a year or two.

8. The Forest Survey Party has continued its operations in the two Thána divisions, and considerable progress has been made in triangulation, traverse and topographical surveys in the divisions concerned.

9. The operations of the Working Plans Branch were again confined to the Thána District, and much useful work has been accomplished.

10. In the matter of concessions, an important Government Resolution was issued during the year on the subject of trees in occupied lands in the Thána and Kolába districts surrendering the rights of Government, purely as an act of grace, over all forest produce outside forest limits, with the exception of teak (Tectona grandis), sissum (Dalbergia latifolia) and sandalwood (Santalum album), growing in occupied uplands, and of tiwas (Ougeinia dalbergioides) in lands under the Kolvan Settlement in addition to the above.

11. The forests of the Dángs were further opened out by transport roads at a cost of Rs. 403-13-10, and another rest-house for the use of officers was under course of construction during the year.

12. Crime, as represented by forest offences taken into Court and compounded by Forest officers under Section 67 of the Forest Act, was less. But the percentage of acquittals in the former class of cases increased from 16·03 in the year before to 26·5 during the year of this report. The number of cases compounded was 419 against 502 in the year 1891-92, and the compensation accepted for damage amounted to Rs. 1,025-3-1.

13. Forest fires both in number and extent show a progressive improvement, except in certain localities in Thána and Surat divisions, where the forests greatly suffered from fire.

14. The grazing revenue continues to be exceedingly low owing to the extent to which free grazing is allowed. But receipts from grass have considerably improved in the West Thána Division. The number of cattle impounded during the year was in excess of the past year, being 6,277 against 4,656.

15. The reproduction of the forests, both natural and artificial, was fairly satisfactory, the rainfall though late having been plentiful.

16. The financial prosperity of the divisions comprised in this Circle has been maintained. The year's gross receipts were greater than in the year previous by Rs. 21,132; but as the expenditure was more by a sum of Rs. 26,192, owing chiefly to the acquisition of land on the Tánsa catchment area by payment of money compensation, the net surplus was less by Rs. 4,960.

17. Timber operations contributed Rs. 5,31,209 towards the receipts of the Circle, and other sources of revenue Rs. 1,04,240

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i). ALTERATION OF AREA.

18. During the year the reserved forest areas received an addition of 14,124 acres by settlement and transfer from protected forests and lost 368 acres by disafforestation.

19. The following statement shows the changes that have taken place in the area under the management and control of the Forest Department in the Northern Circle :—

Class of Forest.	On 1st April 1892.	Added during the year.	Excluded or transferred during the year.	On 30th June 1893.	Remarks.
	Sq. m. a.	Sq. m. a.	Sq. m. a.	Sq. m. a.	
Reserved	933 144	22 44	0 368	954 477	
Protected	601 386	.....	2 53	599 333	
Leased	678 320	.....	.....	678 320	

The additions to reserved area were chiefly due to the acquisition, in the Surat Division, of the A'malchúni forest measuring 229 acres, formerly personal inám, which on the death of the Inámdár reverted to Government, and to the conversion of 13,895 acres of protected forests in the Panch Maháls under Government Resolution No. 6867, dated 27th August 1892. The principal disforestment was in the East Thána Division, in which 233 acres of reserved and 1,331 acres of protected forests were excluded during the year, as the land in question now forms part of the Tánsa Lake basin.

20. The distribution among forest divisions of the legally constituted area on the 1st April 1892 and 30th June 1893 is now exhibited :—

Forest Division.	Area on 1st April 1892.	Area on 30th June 1893.	Difference.	Remarks.
	Sq. m. a.	Sq. m. a.	Sq. m. a.	
East Thána	589 297	678 288	+88 631	Váda Range included in East Thána for the purpose of this statement.
West Thána	679 384	588 147	—91 233	
Surat	*68 153	*68 382	+229	* Exclusive of the leased forests in the Dángs.
Panch Maháls	197 316	218 633	+21 317	
Total ...	1,534 530	1,554 170	.....	

21. Under the authority of Government Resolution No. 985, dated 4th February 1893, the following alterations in the two control charges of Thána were made ; the changes taking effect from 1st April 1893:—

(*a*) The divisions were called Eastern and Western instead of Southern and Northern, and

(*b*) The tálukas were redistributed as under :—

Eastern Division.	Western Division,
1. Kalyán.	1. Sálsette.
2. Sháhápur.	2. Bassein.
3. Mokháda (exclusive of the Taláhsri Mahál)	3 Máhim.
4. Bhiwndi.	4. Dáhánu.
5. Váda.	5. Umbargaon Petha.
6. Murbád.	6. Taláhsri Mahál.

22. The benefits obtained by this arrangement are the equalization of the areas of forests in the two divisions and greater facility of inspection. On the 30th June 1893, therefore, the forest area of the two divisions stood thus :—

Division.	Reserved Forest.		Protected Forest.		Total.	
	Sq. m	a.	Sq. m.	a.	Sq. m.	a.
East Thána...	352	569	325	359	678	288
West Thána	314	173	273	614	588	147
Total ...	667	102	599	333	1,266	435

(ii). FOREST SETTLEMENTS.

23. Forest settlement has been in progress with the following results in each of the forest divisions in which Forest Settlement Officers have been at work.

West Thána.

24. Considerable progress was made in the settlement of the forests of Máhim, Dáhánu and Umbargaon, *i.e.* in the ranges in which the work had yet to be done. The scheme which had been prepared by Mr. Owen, Forest Settlement Officer, but not completed by him before his departure on leave, was, during the year under review, revised and reported on by his successor Mr. McIver after personal inspection of the forests, followed by discussions with the Collector and the Divisional Forest Officer, but the final orders of Government had not been obtained before the close of the year.

25. The Forest Settlement Officer also worked in the Dáhánu and Umbargaon ranges during the year, and the forests of 19 villages in the former were settled, and the proposals are awaiting sanction of Government. If Mr. McIver's work had not unfortunately been interrupted owing to his failing health, on account of which he was obliged to take furlough on medical certificate at the commencement of April, he would have been able to show a much larger amount of work.

26. It is satisfactory to note, however, that a distinct advance has been made in the settlement of the forests of this division, and that really all that now remains to be done could probably be effected in one full season's successful work.

East Thána.

27. Government in their Resolution No. 9848, dated 15th December 1892, appointed Mr. Orr, I. C. S., as Forest Demarcation and Settlement Officer of the tálukas of Kalyán, Bhiwndi, Murbád and Sháhápur, including Mokháda of the Thána District and Karjat and Khálápur of the Kolába District.

28. From 5th January, the date of taking over charge, to 29th February 1893 he was chiefly engaged in the Kolába District of the Southern Circle, and did not commence work in the East Thána Division until the 1st March. During the last three months of the field season, however, he contrived to inspect minutely and finally report on all the forests in 25 villages of the Murbád Táluka aggregating 16 square miles. His order in respect to the right to tâhâl granted to the people in these villages has given rise to an appeal which

was preferred and decided after the close of the year. In his decision the Collector of Thána has upset the Forest Settlement Officer's award on the following grounds:—

"In this appeal the procedure of the Forest Settlement Officer has left me only one thing to do. He has held 25 separate and regular inquiries under Chapter I of the Indian Forest Act, 1878, upon certain rights claimed, and has then lumped the whole of them into a single 26th case upon the general right (as he considers it) to loppings of inferior trees for ash manure, which he apparently considers to be an incident of the tenure of rice land in the 25 villages concerned (though he does not say so in terms). No procedure could be more irregular or inconvenient, and one result of it has been that his proceedings do not include any single one of the particulars to be recorded under Section 12 of Indian Forest Act.

"Now it is certainly practicable in every village of the 25 to obtain a very complete record of the names and other details required by that section.

"And it is evidently very necessary that this should be done.

"I shall then know something of what is before me to decide upon.

"Mr. Orr's whole proceedings dated 6th May and 8th and 19th June, in respect of the combined villages, are cancelled, and he is directed to complete the separate inquiry in each of the 25 villages already begun, and to record the particulars required by Section 12.

"I cannot now pass any order upon his law as a separate matter, but I am inclined to think it possible that when he has completed the records, he will have found some cause for changing his opinion as to the privileges claimed.

"Meanwhile there is now no decision in force upon those claims."

Surat.

29. In this division nothing remains to be done, as forest settlement may be considered as having been completed for all practical purposes.

Panch Maháls.

30. The settlement of the whole of this district is approaching completion. The Forest Settlement Officer, Mr. Maconochie, I.C.S., having finished the settlement inquiries under Section 7 of the Indian Forest Act in regard of the remaining protected forest areas of Dohad and Jhálod, notified as proposed reserves on the 30th June 1891 in accordance with Government Resolution No. 2974, dated 30th April 1891, has submitted during the year a draft notification under Section 19 to Government for publication.

31. The following statement will show the tálukas in which forest settlement and demarcation has been completed and in which such work is still to be done:—

No.	Division.	Tálukas in which Forest Settlement and Demarcation has been completed.	Tálukas in which Forest Settlement and Demarcation is still to be completed.	Remarks.
1	East Thána ...	Kalyán, Bhiwndi, Mokháda.	Murbád, Sháhápur .	Work in progress.
2	West Thána ...	Bassein, Sálsette, Váda.	Dáhánu, Máhim, Umbargaon.	Work in progress; awaiting final orders of Government.
3	Surat	Mándvi, Bulsár, Párdi, Chikhli, Bárdoli.	.....	.....
4	Panch Maháls .	Godhra, Kálol, Hálol.	Dohad, Jhálod ...	Awaiting final orders of Government.

32. The forest area over which the proceedings of the several Settlement officers extended during the year is exhibited below:—

No.	Division.	Area.	Remarks.
		Sq. m. a.	
1	East Thána	143¼ 0	Murbád Táluka.
2	West Thána	141 348	Máhim (121 square miles 438 acres); Dáhánu (19 square miles 550 acres).
3	Surat	0 229	
4	Panch Mahálś	137 0	Dohad (73 square miles), Jhálod (42 square miles), and 22 square miles in Kálol.

33. Considerable advancement has been made and a large amount has been expended on the acquisition of occupied lands coming within the sanctioned forest boundaries by payment of money compensation, as will be seen from the following table :—

No.	Division.	Area acquired.	Price paid.	Rate per acre.	Remarks.
		A. g.	Rs. a. p.	Rs. a. p.	
1	East Thána	0 36½ 4,314 13½	48 12 0 28,056 4 3	54 0 0 6 8 0	Rs. 48-12-0 paid for 36½ gunthas in the village of Murhé in Bhiwndi, Rs. 28,056-4-3 paid for 4,314 acres 13½ gunthas of land on the Tánsa Lake catchment area.
2	Panch Mahálś	101 0	435 6 0	4 5 0	
	Total ...	4,416 10	28,540 6 3	.....	

With the exception of 101 acres and 36½ gunthas all the land on the Tánsa catchment area has been purchased during the year, and the special officer who was appointed for this purpose under Government Resolution No. 3120, dated 31st March 1892, was relieved of his duties on the 1st April 1893. At first sight, it would appear that the former occupants of this land have been very liberally treated, having received Rs. 6-8-2 per acre. But, in addition to buying the occupancy of proprietary rights over the land, compensation for trees and for removing their houses had to be given in some cases. The following details will show how the amount of Rs. 28,056 4-3 was distributed :—

	Rs. a. p.
(*a*) Purchase of 4,314 acres and 13½ gunthas assessed at Rs. 1,129-2-6	23,802 10 5
(*b*) Purchase of 374 trees	663 8 0
(*c*) Compensation for removing 159 houses ...	2,655 8 0
(*d*) Extra payment at 15 per cent.	934 9 10
Total.	28,056 4 3

34. The following statement shows the cost of Forest Settlement Officers and their establishments for the several divisions:—

Division.	Forest Settlement Officers.		Office Establishments.		Contingencies.	Total.
	Pay.	Travelling allowance.	Pay.	Travelling allowance.		
	Rs. a. p.	Rs. a. p.	Rs a. p.	Rs. a. p.	Rs. a p.	Rs. a. p.
East Thána	1,919 10 9	450 0 0	83 11 2	26 0 8	881 11 2	3,361 1 9
West Thána	6,985 10 0	2,127 3 3	2,841 6 4	901 12 10	380 15 0	13,236 15 5
Surat	.....	.....	*3,667 8 3	.....	.....	3,667 8 3
Panch Mahálś ...	.....	.....	.....	.....	71 6 6	71 6 6
Total ...	8,905 4 9	2,577 3 3	6,592 9 9	927 13 6	1,334 0 8	20,336 15 11

* On account of pay and other charges of the office and district establishments of the Dángs Demarcation Officer.

35. The expenditure incurred upon the formation and constitution of reserved and protected forests during the year has amounted to Rs. 54,404-10-6 :—

	Rs.	a.	p.
(1) Salaries and travelling allowances of Forest Settlement Officers not charged to forests ...	11,482	8	0
(2) Salaries and travelling allowances of establishments employed under Forest Settlement Officers and charged in the forest accounts, and the contingent expenditure of the latter	8,854	7	11
(3) Demarcation of forest boundaries upon the ground by the construction of special forest boundary marks...	5,527	4	4
(4) Compensation for land and rights	28,540	6	3
Total....	54,404	10	6

36. The work actually effected during the year, and represented by the expenditure detailed above, comprises—

(*a*) The settlement of 364 square miles at a cost of Rs. 55-14-0 per square mile;

(*b*) The demarcation of 625½ miles of forest boundary at Rs. 8-13-5 per mile, and

(*c*) The purchase of 4,416¼ acres of land for forest reservation at Rs. 6-7-4 per acre.

(iii). DEMARCATION.

37. Prior to the introduction of the fourth edition of the Forest Department Code, demarcation and settlement operations used to be commented on in the administration reports under one heading; but as such operations are now required to be recorded separately, it will be sufficient to mention here, in order to avoid repetition, that demarcation was carried on simultaneously with settlement in the lands referred to in paragraphs 31 and 32.

38. From the following statement it will be noticed that the undemarcated area in this Circle is comparatively small, and, as Government have been pleased to appoint an Assistant Demarcation Officer in Thána, there is every reason to believe that the work will be pushed forward and completed by the close of the year 1893-94 :—

No.	Division.	Area demarcated.			Area undemarcated.			Total Forest area of the Division.		
		Sq.	m.	a.	Sq.	m.	a.	Sq.	m.	a.
1	East Thána	207	330		379	360		587	50	
2	West Thána	427	538		251	487		679	385	
3	Surat	68	382		.....			68	382	
4	Dángs	678	320		.....			678	320	
5	Panch Máháls	333	455		.....			333	455	
		1,716	105		631	207		2,347	312	

39. In the demarcation of forest reservations in the Dángs nothing remains to be done. The cairns erected by the Forest Demarcation Officer, 1,196 in number, were formally taken over by the Forest Department, but this was done conditionally, as it was found that some corrections will have to be made hereafter on account of the surveyors or villagers having (wilfully or not it is difficult to prove) tampered with the positions of some of the cairns. It is not easy to discover such mistakes, if mistakes they are, in a rough country; but, on their being found out, steps will be taken to set them right.

40. The Dáng reserves are now demarcated by 1,196 well-built stone cairns, having cost Rs. 3,524, or Rs. 3 each. Considering the difficulty of procuring labour in this unhealthy and secluded locality the expenditure is very reasonable.

41. In the Mándvi Range of the Surat Division it has transpired, during the year of this report, that owing to the absence of accurate maps at the time of the original demarcation, errors have been made in the emplacement of the cairns. The mistakes already discovered at the time of boundary-line clearances being so numerous that it is under contemplation to move Government to appoint a special officer for revising the old demarcation sanctioned in Government Resolution No. 6445, dated 31st August 1889.

42. In addition to the demarcation performed by the Forest Settlement Officers at the time of enquiring into claims, &c., and settling the forests, which demarcation is necessarily of a somewhat rough and partial character, the work of erecting special forest boundary marks and clearing boundary lines according to the standing orders on the subject was undertaken in all divisions. The amount of work done, together with its cost, is exhibited in the following statement :—

No.	Division.	Length of boundary lines cleared.	Number of Cairns erected.		Stones.	Amount spent.
			Large.	Small.		
						Rs. a. p.
1	East Thána	...	289	613	333	346 3 0
2	West Thána	...	1,134	...	...	525 10 0
3	Surat	67½	1,412	...	...	4,249 5 4
4	Panch Mahála	113½	66	1,085	...	406 2 0
	Total ...	181	2,901	1,698	333	5,527 4 4

(iv). SURVEYS.

43. The field work completed by a portion of No. 17 Survey Party of the Government of India working under Colonel Hutchinson in the Thána District during the year will be gathered from the following summary :—

	Square Miles.
Area triangulated	165
Area traversed	10
Area of detailed survey	60

44. The season's triangulation and traverse work was confined to the Váda Táluka and the detail survey to Bassein, Bhiwndi and Sálsette. All these operations were entrusted to the care of Mr. C. F. Norman; and, considering that they were carried out in three months from March to May in a hilly country covered with mixed teak and evergreen forests, the outturn of field work shown above is very satisfactory.

45. The progress made in the completion of the maps during the recess season is exhibited in the following table :—

Forest Division.	Táluka.	Scale.	Number of field sections.	Final Maps.
East Thána	Bhiwndi ...	8″	1	1
West Thána	Bassein ..	8″	14	10
West Thána	Sálsette ...	8″	13	7

46. The nature, extent and cost of survey operations during the two seasons ending 30th September 1892, and 1893 respectively, are given below for sake of comparison :—

1891-92.

District.	Táluka.	Triangulation.			Traverse.			Topographical 8".			Total.
		Area.	Cost.	Cost Rate.	Area.	Cost.	Cost Rate.	Area.	Cost.	Cost Rate.	
					A.	Rs. a. p.	Rs. a. p.	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
North Thána ..	Váda	..	..	..	(a)13	483 4 3	37 2 9	(b) 52 27	8,415 1 10		8,923 6 1
	Bassein .	..	..	..	..	..	..	..	....	161 9 1	
South Thána ..	Bhiwndi ..	..	..	..	..	..	..	31 2	5,011 11 9		5,011 11 9
	Total ..	..	..	..	13	483 4 3	37 2 9	83 29	13,456 13 7	....	13,940 1 10
Cost per square mile ..		..	..	..	..	37 2 9	..	..	161 9 1	....	....

(a) 57 linear miles in Váda in advance.
(b) Bassein.

1892-93.

District.	Táluka.	Triangulation.			Traverse.			Topographical 8".			Total.
		Area.	Cost.	Cost Rate.	Area.	Cost.	Cost Rate.	Area.	Cost.	Cost Rate.	
		A	Rs. a. p.	Rs. a. p.	A	Rs. a. p.	Rs. a. p.	A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.
North Thana .	Váda ..	165	2,559 7 8	15 8 0	10	154 15 8	15 8 0	..	....	....	2,714 7 0
	Bassein ..	..	....	..	..	..	..	45 0	7,060 0 5	156 14 2	7,060 0 5
	Salsette .	..	....	..	..	..	..	11 20	2,339 7 6	155 14 11	2,339 7 6
South Thana .	Bhiwndi ..	..	....	..	..	..	..	3 80			
	Total ...	165	2,559 7 8	15 8 0	10	154 15 8	15 8 0	60 0	9,399 7 11	156 6 6	12,113 15 3
Cost per square mile ..		..	15 8 0	..	..	15 8 0	..	..	156 6 6	....	....

47. The mileage rates vary very little in the different localities in which the Survey Party was at work, as the features of the country are identical and the cost of the different operations appears to be slightly in favour of the year under report.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—REGULATION AND MANAGEMENT.

(a). Working Plans and their control.

48. The Working Plans Division was transferred from the old to the new Northern Circle on the formation of the latter, and was in charge of Mr. T. B. Fry, Deputy Conservator of Forests, throughout the year. No change was made in the system originally adopted, and the operations of the Working Plans Officer were confined to Thána District.

49. The system in force continues to meet with the favour of officials concerned in the welfare of the forests and of the agricultural interests in the district. There can be no doubt that it best meets the wants of the agricultural classes whilst providing for the maintenance of the forests, and if not altogether a scientific method of treatment it at least paves the way for a better system which may be introduced in the future.

50. In accordance with the orders issued in Government Resolution No. 7107, dated 6th September 1892, every effort was made to exploit all the coupes of the year. The majority of them were eagerly bought up by contractors; but of the number which did not find purchasers some were felled departmentally, while others were left standing.

51. The working plan of the forests comprised in the Bassein Range was reduced to paper, but being subjected to criticisms it was under consideration at the close of the year.

52. The following is the progress statement of work performed by the Working Plans Officer and his establishment during 1892-93:—

No.	Range.	Total Forest Area.	Number of Blocks per Range.	Number of Compartments actually laid out in 1892-93.	Average Area of Compartments actually laid out.	Remarks.
	East Thána.					
1	Kalyán	32,178	16	15	44	Average normal area of compartment is 65 acres.
2	Murbád	71,712	20	20	49	
3	Bhiwndi	46,099	20	20	49	
4	Mokháda	40,190	16	25	62	
5	Khardi	149,366	52	52	61	
6	Sháhápur					
	Total ...	339,545	124	132	53	
	Total during 1891-92.	339,545	124	142	50	
	West Thána.					
1	Sálsette	14,441	10	10	39	Average normal area of compartment is 51 acres.
2	Bassein	51,230	23	24	51	
3	Máhim	76,033	35	43	48	
4	Dáhánu	107,351	45	56	59	
5	Umbargaon	23,008	12	12	46	
6	Váda	77,031	33	40	55	
	Total ...	349,094	158	185	50	
	Total during 1891-92.	358,441	164	199	52	

53. The expenditure on these operations is exhibited below, from which it will be seen that the cost per acre of laying out the compartments of the year under report is very slightly in excess of that of the preceding year :—

No.	Range.	Number of Compartments.	Defined by		Aggregate Area of Compartments.	Cost.	Average Cost per Compartment.	Average Cost per Acre.	Remarks.
			Cairns.	Stones.					
	East Thána.				A. g.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
1	Kalyán	15	35	933	656 10	57 4 0	3 13 1	0 1 7	
2	Bhiwndi	20	12	1,655	993 0	67 12 0	3 6 2	0 1 1	
3	Murbád	20	66	1,611	982 20	84 14 0	4 6 4	0 1 5	
4	Sháhápur	52	161	4,609	3,154 0	232 6 0	4 6 10	0 1 2	
5	Khardi								
6	Mokháda	25	94	2,427	1,556 30	117 1 6	4 10 10	0 1 2	12 additional coupes marked.
	Total ..	132	368	11,235	7,342 20	559 5 6	4 2 3	0 1 3	
	West Thána.								
1	Umbargaon	12	88	1,024	549 0	58 8 6	4 14 0	0 1 8	
2	Dáhánu	56	234	4,973	3,309 0	291 13 6	5 3 4	0 1 1	
3	Máhim	43	122	3,124	2,074 0	162 0 9	3 12 3	0 1 3	
4	Bassein	24	2	1,872	1,171 10	89 12 0	3 11 2	0 1 2	One additional coupe marked.
5	Váda	40	154	3,621	2,187 0	201 10 9	4 12 8	0 1 4	Seven do.
6	Salsette	10	23	690	394 0	40 5 0	4 8 0	0 1 7	
	Total ..	185	623	15,304	9,684 10	844 2 6	4 7 7	0 1 4	
	Grand Total ..	317	991	26,539	17,026 30	1,403 8 0	4 6 10	0 1 4	
	Total during 1891-92.	341	1,121	29,918	17,556 0	1,468 2 4	4 3 2	0 1 4	

(*b*). Annual Plans-of-Operations.

54. Under the orders issued in Government Resolution No. 7107, dated 6th September 1892, the annual plan of operations is now submitted by Divisional Forest Officers through their respective Collectors, in order that the latter may consider any proposed closure of forest areas against grazing or other privileges, and may see that due provision is made for local wants, and also that he may make known to the people where supplies of wood, grass, and ráb may be obtained, and the localities in which grazing is prohibited or allowed.

55. The operations projected in the annual plan at the beginning of the year were, on the whole, satisfactorily carried out. The deviations worth recording will be noted in the next chapter.

II.—WORKING OF THE YEAR.

(*a*). Communications and Buildings.

56. As a rule, the construction of roads is not undertaken departmentally, as in all the accessible forests the contractors during the exploitation of coupes purchased by them do a considerable amount of rough road-making, which is sometimes afterwards serviceable for country cart traffic.

57. In the forests of the Dángs the case is different, and a system of well-considered roads is being laid out as funds are available.

58. The building works undertaken by the Forest Department consist in the erection of forest guards' houses built, in the usual style of village huts, of teakwood and wattle with thatched roofs; such guards' huts now exist all over the Northern Circle.

59. At the instigation of the Collector a number of new cattle-pounds has been erected in the two Tháná divisions to aid in the work of enforcing protection of closed coupes. The selection in the villages in which the pounds should be built, was made by the Divisional Forest Officers after consulting the local Revenue officers, good central situations being chosen. These pounds consist of a wire-fenced enclosure of about 1,200 feet with a teakwood gate at one side; in the middle of this enclosure a thatched or tiled shed is built as a protection to cattle against heat or wet.

60. The amount spent on works under this head was Rs. 649, on roads and bridges Rs. 535, buildings Rs. 1,660, and other works Rs. 110. The details of this expenditure are shown below:—

Description of Work.	East Thána.		West Thána.		Surat.		Panch Mahals.		Total.	Remarks
	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.		
		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.	
1. Bungalows—										
New work... ...	...	.....	...	.....	2	1,244 3 6	...	.....	1,244 3 6	
Repairs	1	145 4 6	2	42 0 0	5	135 4 7	1	41 11 0	364 4 1	
2. Roads—										
New work... ...	*3½ miles	11 2 0	...	.....	8 miles.	524 9 10	...	.....	535 11 10	*For extraction of material in coupes worked departmentally.
Repairs	...	.....	...	.....	91 miles.	367 10 9	...	.....	367 10 9	
3. Depôt houses—										
New work... ...	4	294 13 0	...	.....	...	.....	...	.....	294 13 0	
Repairs	...	.....	1	8 0 0	...	.....	...	.....	8 0 0	
4. Guards' huts and forest posts—										
New work... ...	3	30 0 0	2	20 0 0	4	51 8 4	2	20 0 0	121 8 4	
Repairs	116	448 4 0	135	371 0 0	8	20 2 0	8	50 13 0	890 3 0	
5. Cattle-pounds—										
New work... ...	16	290 9 6	11	359 0 0	...	.....	...	.....	649 9 6	
Repairs	...	.....	...	.....	...	.....	...	.....	.....	
6. Other works—										
New work	...	.....	...	.....	2	110 0 0	...	.....	110 0 0	
Repairs	...	.....	...	.....	...	.....	...	.....	.....	
Total ...	...	1,220 1 0	...	800 0 0	...	2,453 7 0	...	112 8 0	4,586 0 0	

61. The following is a list of works carried out during the year through the agency of the Public Works Department:—

	Name of Work.	Amount of expenditure.
		Rs. a. p.
1.	Forest Depôt House at Sáwtá	1,082 11 2
2.	Do. do. A'tgáon ...	1,066 4 4
3.	Do. do. Wángni ...	1,190 1 0
4.	Do. do. Kasárá ...	1,075 13 4
5.	Do. do. Wásind ...	1,172 9 5
6.	Do. do. Pálghar ...	1,181 5 1
	Total ...	6,768 12 4

(*b*). Protection of Forests from Injury.

(1). General Protection and Breaches of Forest Law.

(a). General Protection.

62. The forest protective staff, during the year, received no addition to its strength, although the want of a larger establishment is greatly felt. A scheme for the reorganization of the subordinate staff is before Government, and orders thereon are awaited.

63. It is necessary to record that although the number of forest guards is now the same as it was when last strengthened seven years ago, the work expected of them has increased enormously owing to the more extended working of the forests in all the divisions of this Circle.

64. It is now practically impossible for a beat guard to exercise proper supervision on the operations of the contractors and permit-holders as well as to protect the rest of his charge; and though the protection of the forest has not deteriorated, there is not that improvement visible of late years which one has a right to expect with the march of civilization and settlement of the forests.

65. Although systematic *loot* of the forests on anything approaching an extensive scale is of rare occurrence, petty thefts continue to be committed. The latter are, however, confined to material required for personal use, for barter, or for the use of some other party, and who is generally himself able to evade the hand of the law.

66. The dead-wood privileges are also fruitful sources of injury to the forests, as the temptation to manufacture dead-wood by hacking down trees in advance or by firing the forests is very great. With regard to this the Collector of Thána writes :—

"The special system of dead-wood collection near Thána is a cause of mischief, and I would be glad to see it abolished. The similar (though not identical) system in Bhiwndi (in the Eastern Division) is even more injurious, and there is really no reason for maintaining either."

67. A few bad cases of thefts of standards in the coupes under exploitation were discovered, but as it was found impossible to prove the actual complicity of the contractors concerned, they were severely dealt with under the penal clauses of the coupe agreements.

68. The work of the protective staff is far from being satisfactory, but large allowance has to be made on account of the size of their charges and the multifarious duties the men are now called upon to perform. In the interests of efficient protection of the forests there is no doubt that the number of forest guards will have to be at least doubled in such divisions of this Circle in the near future. The following remarks of the Collector of Thána in this connection are worth quoting :—

"It is very evident that, at the time that the present system of felling by strict and regular rotation was introduced, no officer concerned was in a position to know how large an establishment is required to work such a system properly, or how often the attempt has had to be given up by private owners of wood land in other countries."

(b). Breaches of Forest Law.

69. In judging of the extent of the breaches of forest law which are now to be recorded, it must be remembered that this report deals with a period of 15 months instead of 12 only. There has been a notable decrease in the number of cases sent to trial during the year, the figures being 291 in place of 364. Too much importance must not, however, be attached to this decrease; for, though there is no evidence that supervision of the forests has been less effective than usual, or that more leniency has been displayed than formerly by Divisional Forest Officers in the treatment of offences discovered, yet it is improbable that such a considerable advance in law-abiding behaviour should have been made by the people at large in the year. Unfortunately the larger number of undetected offences—782 as against 587—conclusively proves the truth of the above remarks.

70. Similarly it will be found that the number of cases compounded by Divisional Forest Officers under Section 67 of the Indian Forest Act has decreased. In 1891-92 the number for 12 months was 502, whilst in 1892-93 the number for 15 months comes to 419 only.

71. A comparative statement of the number of cases tried before Magistrates for breaches of the forest law during the year under report and the year preceding, with the results of the trials, is given below :—

No.	Division.	1891-92.		1892-93.		Percentage of failures.	
		Prosecutions.	Acquittals.	Prosecutions.	Acquittals.	1891-92.	1892-93.
1	East Thána ...	113	30	110	43	26·5	39·
2	West Thána ...	158	18	108	17	11·3	15·7
3	Surat ...	3	1	3	...	33·3	...
4	Panch Mahâls .	62	5	13	2	8·0	15·4
	Total ...	336	54	234	62	16·03	26·5

72. In addition to the 263 new cases taken into Court there were 28 cases brought over from the preceding year. Of the total number, 234 were disposed of by the 30th June 1893, with the result that there were 172 convictions and 62 acquittals. The percentage of failures in the different divisions save Surat is higher than in the year before; but, though there is a rise of 10·47 in the percentage of acquittals for the Circle, still the average—26·5—cannot be regarded as a bad one when the difficulties of forest protection are taken into account. 57 cases were awaiting disposal at the close of the year.

73. No explanation, as regards East Thána, for the very high percentage of acquittals is traceable from the Divisional Report, but the Collector in his remarks accompanying that report accounts for it as follows :—

"I review nearly all forest convictions myself, and I think the falling off in percentage of convictions to be rather due to greater care on the part of the Magistrates (formerly very lax in the matter of evidence in forest cases) and to the personal equation of one or two Magistrates than to any difference in the departmental methods of prosecutions."

74. In the statement following, comparison is made between the numbers of cases in which prosecutions were instituted for the two years 1891-92 and 1892-93 classified under the four different heads of crime as prescribed by the Forest Department Code :—

No.	Division.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Thána ...	6	7	98	125	3	2	16	2	123	136
2	West Thána...	2	2	74	97	4	5	78	8	158	112
3	Surat	...	...	3	2	...	...	...	1	3	3
4	Panch Mahâls.	...	...	62	11	...	1	2	...	64	12
	Total ...	8	9	237	235	7	8	96	11	348	263

75. The following table exhibits the nature and character of the offences tried by Magistrates during the year of this report—

No.	Division.	Offences relating to the misappropriation of				Total.
		(a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	(d) Other Offences.	
1	East Thána	84	32	7	13	136
2	West Thána	51	31	12	18	112
3	Surat	1	...	1	1	3
4	Panch Mahals	10	1	1	...	12
...	Total ...	146	64	21	32	263

76. The classification of undetected cases is given below :—

No.	Division.	Injury to Forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other Offences.		Total.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Thána	...	152	295	270	..	...	...	...	295	422
2	West Thána	...	177	224	128	...	...	...	29	224	334
3	Surat...	...	...	...	...	...	...	...	...	...	...
4	Panch Mahals	...	...	68	26	...	...	...	...	68	26
	Total ...	...	329	587	424	...	...	...	29	587	782

77. The following statement will show the number of cases decided in accordance with Government Resolution No. 7844, dated 3rd October 1884, in the Revenue Department, by Revenue officers under Section 43 of the Land Revenue Code, in the Thána District, as compared with that of the previous year :—

No.	Division.	1891-92.					1892-93.				
		Number of cases.	Value of Forest Produce.	Acquittals.	Convictions.	Amount of fines.	Number of cases.	Value of Forest Produce.	Acquittals.	Convictions.	Amount of fines.
			Rs. a. p.			Rs. a. p.		Rs. a. p.			Rs. a. p.
1	East Thána ...	1	1 8 0	...	1	1 8 0	12	49 7 0	...	12	50 1 0
2	West Thána ...	5	8 5 3	...	5	6 7 9	4	159 15 6	...	4	159 15 6
	Total ...	6	9 13 3	...	6	7 15 9	16	209 6 6	...	16	210 0 6

78. A comparative statement, showing the number of cases compromised under Section 67 of the Indian Forest Act and taken into Court, is given below :—

No.	Division.	Taken into Court.		Compounded under Section 67 of the Forest Act.		Total number of cases.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Thána...	130	153	254	173	367	326
2	West Thána	167	121	96	122	254	243
3	Surat	3	3	17	17	20	20
4	Panch Mahals	64	14	135	107	197	121
	Total ...	364	291	502	419	866	710

79. The classification of the cases compounded during the year is given below as desired in Government Resolution No. 7232, dated 12th September 1892 :

No.	Division.	Offences relating to the misappropriation of				Total.
		(a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	(d) Other Offences.	
1	East Thána	90	40	17	26	173
2	West Thána	31	27	27	37	122
3	Surat	8	3	3	3	17
4	Panch Mahâls	70	23	12	2	107
	Total ...	199	93	59	68	419

80. In the Northern Circle as at present constituted, it appears it has been the custom to release offenders with a warning or without exaction of damages or other punishment when the offence committed was unintentional or otherwise to some extent venial. The triviality of a forest offence cannot be gauged by money valuation, as however trivial in its character it stands to reason that if often repeated, or if committed independently, it becomes grave, and, therefore, it is often necessary to take cognizance of offences which at first sight appear of no significance.

81. Since the promulgation of the orders contained in Government Resolution No. 8626, dated 3rd November 1892, the Collectors have had an opportunity of reviewing the monthly abstracts of cases compounded under Section 67 of the Indian Forest Act submitted to them, and they have not had any occasion to find fault with the Divisional Forest Officers' procedure.

82. The number of offences which were treated as trivial, and the offenders in which were merely warned after their offence had been reported on and considered, was 72. Unfortunately it is impossible to compare this number with that of the previous year's, as figures for the latter are not available.

83. The statement below gives the required details in respect of money paid during the year 1892-93 as compensation for forest offences claimed under Section 67 of the Indian Forest Act :—

No.	Division.	Number of cases compounded and in which compensation has been accepted.	Amount of compensation.	Remarks.
			Rs. a. p.	
1	East Thána ...	173	324 7 7	
2	West Thána ...	122	478 12 9	Rs. 12-8 were not recovered at the end of the year.
3	Surat	17	69 1 4	Rs. 5-14-8 do. do.
4	Panch Mahâls ...	107	152 13 5	
	Total ...	419	1,025 3 1	

84. The 419 cases of compounded offences classified according to the payment agreed upon were as follows :—

No.	Division.	Number of cases in which compensation was fixed at Rupees																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 to 49	50	
1	East Thána	119	22	10	7	2	3	2	2	...	2	...	...	1	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	173
2	West Thána	54	31	10	7	5	...	1	...	1	1	2	2	...	1	1	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	3	122
3	Surat	9	1	1	...	2	...	1	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
4	Panch Mahâls	75	15	4	2	...	...	6	...	...	...	...	...	...	2	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	107
	Total ...	257	69	25	16	9	3	10	3	1	3	2	2	1	4	2	1	...	2	...	2	1	1	1	...	...	...	...	...	1	...	3	419

85. The information given in the following statement is in accordance with paragraph 11 of Government Resolution No. 1899 of the 15th March 1891 :—

No.	Division.	Number of complaints disposed of under Section 67.	Number of cases in which compensation has been accepted.	Number of appeals against the proceedings.	Manner in which appeals have been disposed of.	Remarks.
1	East Thána ...	187	173	...	...	In 14 cases offenders were let off with a warning.
2	West Thána ..	150	122	...	...	„ 28 do. do.
3	Surat	25	17	...	...	„ 8 do. do.
4	Panch Mahál ...	129	107	...	...	„ 22 do. do.
	Total ...	491	419	...	...	72

(*b*) (2) *Protection from Fire.*

86. The results of the year's fire protection as compared with those of the year 1891-92 are shown below :—

No.	Division.	Forest area placed under protection against fire.		Acreage burned.		Percentage burned.		Remarks.
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1	East Thána ...	377,780	451,956	10,420	18,515	2·7	4·09	For the purpose of this statement, Váda Táluka is included in East Thána.
2	West Thána ...	436,398	358,719	8,613	5,462	1·9	1·5	
3	Surat	477,913	478,141	432,583	434,990	90·5	90·9	
4	Panch Mahál ...	200,109	213,575	10,133	3,944	5·06	1·8	
	Total ...	1,492,200	1,502,391	460,630	462,911	30·8	30·7	

87. The past season was an exceptionally favourable one for the prevention of forest fires. Late rains kept the grass green till well into the cold weather and few fires were reported before the first week in January, the hot weather was also milder than usual, rain fell in May—which all tended to shorten the period of the fair season.

88. On the recommendation of the Commissioner, N. D., Government sanctioned in their Resolution No. 757, dated 27th January 1893, the adoption, in all the other divisions of this Circle, of the practice introduced in the Thána District two years ago of reporting at once each forest fire to the Collector on a post card by the nearest literate forest subordinate. The action taken by the Revenue head of the district on receipt of those reports has produced a very good effect on the officers under him, *viz.*, that they now understand that they are expected to give every assistance in extinguishing fires and help the forest protective staff in tracing their causes,—matters which were only dimly recognised before. This system has now taken a firm root in Thána and may be said to have passed the experimental stage. In villages where before forest guards had difficulty in inducing people to turn out to aid in suppressing fires, the latter turn out of their own accord in the absence even of a forest subordinate directly they find that a fire has burst out in their forest.

89. In the Panch Mahál and Surat divisions, in which the system described above has only been recently introduced, the good results noticed in Thána were not apparent, but when it has had time to develope itself, there is no

doubt that Revenue subordinates and villagers will co-operate with the forest staff in exactly the same manner.

90. It is satisfactory to note that greater activity was displayed in all divisions for carrying out fire-protection measures, and if the figures of the previous year had been as correct as those of that under report, considerable improvement would have been noticeable at first sight.

91. *East Thána.*—Out of the 159 fires reported, 65 occurred in the Tánsa basin forests and which are responsible for two-thirds of the area burnt in this division. Mr. Sinclair, the Collector, remarks in his review of the divisional report that

"Last report's figures were particularly unreliable in this division, as it could not be made out, after Mr. Osmaston's departure on sick leave, what months were included in his fire year. My own suspicion is that they were only the months of November and December 1891 and January, February and March 1892. The diaries showed ample reason for supposing the areas to be much underestimated in the fire reports, which are now rather more accurate. The figures of the present report will form a point of departure for the future."

92. There is no doubt, however, that as long as the protective staff remains at its present strength, it can hardly be hoped that the fires in the forests on the Tánsa Lake catchment area can be checked to an appreciable extent. The villages having been depopulated, and the distance to be traversed to get round the lake from one point to another being great, it is exceedingly difficult to procure assistance to extinguish fires. When the reorganization of the subordinate pretective establishments is sanctioned, it will be imperative to at least double the number of forest guards in this neighbourhood to protect these forests efficiently from fire.

93. *West Thána.*—Exclusive of the Váda Range, which now forms part of the East Thána Division, there were 155 fires of the year running over 5,462 acres against 163 burning 7,400 in 1891-92. The prominent feature in the fire conservancy of this division was the excellent fire discipline maintained by the Divisional Forest Officer whereby a large number of the fires reported during the year were speedily extinguished before they had time to get out of hand. These satisfactory results reflect great credit on Mr. Millett, the Divisional Forest Officer, and on Mr. Rebeiro, Extra Assistant Conservator of Forests, and Range Forest Officer Hassanalli Mahomedalli. The last-named officer bears the palm for fire protection. In his range (Dáhánu) not only is the area burnt considerably less than in the previous year, but the origin of 7 out of the 28 fires of the year was traced, and the offenders punished.

94. *Surat.*—The fires in the leased forests of the Dángs have proved no less disastrous than in previous years. By the beginning of April they had swept over the whole area, not once but twice and three times. So long as the policy of not interfering with the privileges of hunting, collecting mhowra flowers, smoking rats in their holes enjoyed by the Bhils and other wild tribes unrestrictedly is allowed to continue, fire-protective measures will be of no avail in these valuable forests. Considerable laxity seems to have prevailed in reporting forest fires in the Mándvi Range during the last two years, and the figures as regards the area burnt over in the past cannot be relied on. In the beginning of the year, if it had not been pointed out to the Divisional Forest Officer that the fire reports were most of them grossly inaccurate, several fires would not have been reported at all, or not till long after the event. Mr. Wallinger, however, took great pains and has carefully gone over the range, so that the area burnt during the year in Mándvi may be taken as pretty accurate. The principal difficulties to be met with are, that the eastern portion of this range, a block of 12,900 acres, in which most of the fires occurred, is unpopulated and conterminous with the Gáekwár's territory. Great vigilance was, however, exercised for preventing the fires from sweeping down from the latter, and no single fire of the year proved disastrous. It is also satisfactory to record that whereas the origin of not a single fire was traced ever before in this division, during the year under report, in five cases the person by whose action the forest was fired was detected and punished.

95. *Panch Mahâls.*—There is a marked improvement in this division, as the area traversed by fire is considerably less than in the previous year, the figures being 3,944 acres as against 10,133 in the year 1891-92. The Divisional Forest Officer, however, reports that several of the fires of the year "have the character of being exceptionally large." This will be remedied when the object for which the reporting of forest fires to the Collector directly on their occurrence is better understood by the Revenue subordinates and the people at large.

96. The expenditure incurred, during the year of this report, on burning fire lines, rewards to villagers on rendering prompt assistance in putting out fires, &c., is compared with that of the preceding year in the following statement:—

No.	Division.	Expenditure.		Remarks.
		1891-92.	1892-93.	
1	East Thâna	701	1,576	
2	West Thâna	2,364	2,029	
3	Surat	43	186	
4	Panch Mahâls	2	...	
	Total ...	3,110	3,791	

(b) (3). Regulation of Grazing and Protection from Cattle.

97. The revised rules for the regulation of grazing published under Government Resolution No. 3595, dated 23rd May 1890, are at present applied to the Bassein, Kalyân and Bhiwndi ranges in the Thâna District and to all the forest areas in Surat except the Dângs. The introduction of these rules in the Panch Mahâls Division was under contemplation, and it is hoped that they will soon be generally applied. On the working of the rules wherever they have been introduced, no complaint has been received during the year; but there is reason to fear that very many cattle enjoyed free grazing for which fees really ought to have been paid. This fault will gradually disappear and will give no trouble in the future, as there is a tendency not to put too liberal an interpretation on the rules.

98. In the two Thâna divisions only 104 out of 1,264 square miles are at present closed to grazing, but as the coupes of each year up to a limit of ten years are exploited, the proportion will increase.

99. The extent of closures in Surat is limited to only 28 square miles out of a total of 746¼. But exclusive of the Dângs the percentage of closed area is higher than anywhere else in this Circle, being 41. It is important to remember, however, that only in this division a close season from 16th March to 31st August for grazing has been observed for the last two years, and the people are commencing to learn to make provision of fodder to feed their cattle on during the time grazing is forbidden in the forests.

100. A third of the area under the management of the Forest Department is closed to grazing in the Panch Mahâls, but owing to the inefficiency of the protective staff the closures are not respected, and a great deal of illicit grazing is prevalent in this district than anywhere else in the Northern Circle.

101. The number of animals impounded during 1891-92 and 1892-93 for trespassing in open and closed forests is compared in the following table:—

No.	Division.	From open Forests.		From closed Forests.		Total.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Thâna	18	421	680	1,260	698	1,681
2	West Thâna	286	67	1,553	1,598	1,839	1,665
3	Surat	23	314	379	927	402	1,241
4	Panch Mahâls... ...	1,595	1,464	122	226	1,717	1,690
	Total ...	1,922	2,266	2,734	4,011	4,656	6,277

102. Notwithstanding the above return is for 15 months, and not for 12, the impoundings have been heavier in the East Thána and Surat divisions than in the previous year. The reason for the increase in the former is probably the larger number of cattle-pounds erected for facilitating the impounding of cattle, which in former years could only be driven out of the forests, because the distance of the nearest pound from the scene of offence was too far to make it practicable to drive the cattle there.

103. A considerable number of the animals impounded in Surat were for evading payments of the prescribed fees. This step was only taken after repeated warnings had been given to the owners. On this subject while commenting on the Divisional Report the Collector of Surat remarks as follows :—

"The number of cattle impounded has gone up from 204 to 1,241, but it is submitted that the latter number is by no means excessive for 68 square miles of forest during a whole year. The grazing fees in Mándvi though very equitable are naturally not popular, and it is quite impossible to introduce them effectively among a people as unused to restrictions as Gypsies without some slight punitive measures; the method of impounding is the most lenient way possible of teaching them that those who graze must pay."

104. The number of cattle actually impounded during the year in the several divisions of this Circle, however, by no means represents the number of cattle that are found grazing where they have no right to graze. In the first place, many are sure to escape when a large number are caught, as it is impossible for one or two guards to drive all of them. In the second place, owners often attempt to rescue the animals on their way to the pound when they find it can be done successfully and the law cannot be always brought to bear upon them. To lax supervision also, it must be admitted, on the part of guards much illicit grazing prevails in closures.

105. The sites of the pounds erected during the year by the Forest Department in the two Thána divisions under the orders of the Collector have been carefully selected with regard to the positions of the forests and of formerly existing pounds. The object aimed at is to have a pound within a reasonable distance of the forests in which cattle trespass is to be apprehended.

Fencing.

106. In the East Thána Division no new fences were erected, attention having been paid only to keep the old ones under repairs.

107. Operations on a larger scale than formerly were projected in the West Thana Division to fence in the lower boundaries of exploited coupes in which cattle trespass was to be apprehended, but unfortunately the supply of wire failed, and the work was left half finished.

108. In Surat the area worked out during the year in the Párner Reserve (9 acres) was fenced in with wire.

109. No kind of fencing was attempted in the Panch Mahaˊls Division.

Civil Suits.

110. Two civil suits left over from the preceding year were disposed of during 1892-93. These were as follows :—

Gangádhar Vishwánáth Kondkar brought a suit against the Forest Department, claiming damages to the extent of Rs. 2,719 for alleged wrongful suspension of his contract for the Rajawli coupe in the West Thána Division. The suit was decided against Government, and a decree for the sum of Rs. 1,229-8-0 was passed in favour of the plaintiff for damages and costs.

111. The suit filed against the Izaˊfatdárs of A'mgaon, táluka Vaˊda, in 1890-91 to recover quit-rent and nazrána on account of timber and other forest produce cut and removed by them from the forest of the village, was determined in favour of Government, and the amount of cess to be paid was fixed.

112. Mr. V. D. P. Rebeiro, Extra Assistant Conservator of Forests, was sued in the Subordinate Judge's Court at Thána by one Shivaraˊm Dipchand, one of the defendants in the criminal prosecutions instituted by Government against Dádu Sukar, contractor of the Shirgaon coupe, and others in 1891-92 claiming Rs. 1,055-5-6 as damages on account of alleged false complaint and his unlawful

detention in custody for some 19 days. The case was decided against the plaintiff, who had to pay costs of the suit.

Criminal Cases.

113. Criminal proceedings were instituted against one of the Depôt officers serving in the Dángs, Gulábchand Prágji, for having levied excess fees upon produce removed, and thereafter under fear of detection for having burnt some portion of his records. The Political Agent, Khándesh, before whom he was arraigned, sentenced him to one year's rigorous imprisonment.

(*c*). Improvement of Forest Growth.

(*1*). *Natural Reproduction.*

114. In the Thána forests natural reproduction was vigorous during the year and would be perfect if fires and cattle trespass could be wholly checked. The coppice in most of the exploited coupes grows fast, though the teak excels other species in this respect during the first years of its re-growth. The shoots also suffer to a certain extent, when they first commence to appear, from the browsing of wild animals such as Portax pictus, Tetroceros gudricornis and Cervalus arcus; the neighbourhood of a recently felled coupe being almost a certain find for one or other of these animals. In a good many of the compartments exploited in the earlier years of the Working Plan rotation, *i.e.* in 1887-88, a dense crop of promising mixed forests is now to be seen, and the progress made by each year of successful closure in dominating the grass, reeds and other noxious growth has secured the compartments from all possible danger from fires. So long as there is a sufficient area open to grazing for the wants of the people, it is not advisable to shorten the limit of closure of ten years fixed in the Working Plan, for the longer the young stock is left undisturbed the better it will grow.

115. The fires of the year having not proved disastrous, except in the forests on the Tánsa Lake catchment area, and the rainfall having been ample though late, a plentiful crop of seedlings, it is very natural to expect, should have established themselves, as it is invariably found that they do so when the above circumstances are present.

116. The plague of caterpillars noted by Mr. Shuttleworth as having probably interfered with the flowering and seeding of the teak, by eating all their leaves and checking the growth of trees, was fortunately absent during the year.

117. It is worthy of notice that the Inga dulcis, which was experimentally cultivated on the Thána-Panvel road, has now become firmly established and reproduces itself naturally. Several self-sown seedlings are now found in the vicinity of the parent trees on the borders of the adjoining forests.

118. In the Surat Division natural reproduction is somewhat retarded by fires, and as a whole is not very satisfactory. Bulsár and Chikhli ranges are, however, exceptions to the general rule, and are a splendid example of what Nature can do in this respect. The remarks of Mr. Lely, the Collector, on this subject are worth quoting :—

"Some of the forests in the south of the district though small are pictures. In Mándvi Táluka the soil is inferior, but the Department is there reclothing large tracts of land and vindicating itself as one of the most useful agencies of the country."

119. Natural reproduction in the Panch Maháls Division is to be found in small patches few and far between, but wherever it presents itself it is good. Owing to the state of the forests being generally far from fully stocked, it only asserts itself very slowly; and, until the people learn to respect the closures better than they do at present, prospects of clothing denuded areas solely by natural means are very remote.

(*2*). *Artificial Reproduction.*

120. Cultural operations in this Circle are, as a rule, confined to the exploited compartments and other closures in order to assist natural reproduction. Regular plantations properly so called, being very small in extent, appear to have

an educational rather than a fiscal value, and have not been made hitherto with a view of covering large denuded areas.

121. In the East Thána Division, in addition to the work of filling up blanks in closures by broad-casting and dibbling seed or pit planting, the lands acquired on the catchment area of the Tánsa Lake were again operated upon. It has been already remarked in paragraph 92 that fires devastated that area; but from recent reports it appears that a large percentage of plants have shot up again, showing that they were deep rooted. Forest guards sowed 3,640 maunds of different kinds of seeds and transplanted a large number of seedlings procured from the surrounding forest over 871 acres.

To fill up bare places in the coupes of the West Thána Division, pit planting was chiefly resorted to with fair success and a considerable quantity of seed was scattered about the forests to aid natural reproduction. A small plantation occupying 3 acres was started at Rábále in the Sálsette Range, and the usual method of sowing and transplanting was adopted. The success of the plantations was not, however, assured, as a large number of the young plants died off; the exception being in the case of some teak and ain transplants, which remained healthy throughout the hot weather, though their growth was necessarily slow.

122. In the Surat Division the results of the year's operations are said to be successful, especially in the small coupes of the Bulsár and Chikhli ranges. In Mándvi, however, owing to the majority of the plants on the area (177 acres) taken in hand in the previous year having died off, the same was replanted with teak and other valuable species; new plantations covering 18 acres were created in the Wareth Reserve.

123. Artificial as well as natural reproduction has no chance in the forests of the Dángs so long as fires sweep over them year after year from end to end.

124. In the Panch Mahál's Division 247 maunds of miscellaneous seeds were collected and sown by forest guards over 410 acres with very indifferent results. Mr. Fisher reports that "operations of this and past years show very poor results,—in fact, none from an economic point of view." The cause of failure appears to be that sufficient supervision has not been exercised in the past over the subordinates in this matter. The Divisional Forest Officer's attention has been drawn to this fact, and it is hoped that cultural operations will be better looked after in the years to come.

125. The area and cost of the foregoing operations in the several divisions were as under :—

No.	Division.	Area	Cost.	Remarks.
		Acres.	Rs. a. p.	
1	East Thána	5,129	.....	
2	West Thána	24,512	474 0 0	
3	Surat	1,380	466 0 0	
4	Panch Mahals	742	.....	
	Total ...	31,763	940 0 0	

(3). *Early Thinnings.*

126. This operation is of a very delicate nature and, unless intelligently performed, it ceases to be advantageous in the interest of the young stock. Such work, therefore, cannot be entrusted to the subordinates, and has not been undertaken hitherto by Divisional Forest Officers personally, owing to the extent of their charges and the minute attention they are required to pay to details in the general working of the forests.

(4). *Other operations for the improvement of the growing stock.*

127. Forest guards in all the divisions of this Circle, with the exception

of the Panch Mahâls, are equipped with axes or bill hooks for the purpose of destroying creepers and other noxious growth, and a large amount of work is thus performed, but it fails to make any visible impression, as a rule, on the forests. During the past year, however, the standards in some of the closed coupes of the West Thâna Division were specially ordered to be freed of the Loranthus longifolia parasite described in paragraph 187 by Mr. Shuttleworth in the last report. For the Mâhim and Vâda ranges alone details are available: in the former 37 coupes were treated at a cost of Rs. 56, and in the latter 4,903 creepers were cut by forest guards, entailing no expense.

(5). *Experiments.*

128. In the East Thâna Division the only experiment made during the year was with Casuarina equisetifolia, seeds of which were sown in baskets and distributed among the beats in the Murbâd Range. A fair percentage of the plants appears to have survived the hot weather, but it is doubtful whether they will thrive so far from the sea-coast. The Gulf-date palm seedlings in Mokhâda, which were reported to be doing so well in 1890-91, are said to be thriving, having reached a height of 3 to 4 feet, but it is very doubtful whether they will bear fruit. In the Surat Municipal Gardens, where the tree has flourished for nine or ten years, it has not fecundated.

129. The growth of the casuarina in the small experimental plantations in the Dâhânu and Umbargaon ranges of the West Thâna Division continued to make satisfactory progress. In the last-named range it was not deemed necessary to water the Deheri plantation any longer. A few of the plants certainly did die off, but it was not proved that their disappearance was due to want of moisture. Experiments for introducing the Gulf-date palm and the sandalwood tree (Santalum album) have not met with any success. Mr. Millett reports as regards the latter that—

> "Many experimental sowings of seed have been made, but the plants that come up are poor, stunted and scentless; the majority quickly die. Those that survive give more trouble than they are worth."

130. In the Surat Division the anticipated success of the casuarina plantation, commenced last year near Tithal, has not been realized, as out of 500 seedlings transplanted from the nursery, only 260 were able to survive the hot weather, notwithstanding that the plantation was watered by hand all throughout the dry season, and measures were taken to protect the plants from the south-westerly winds. The sandalwood trees reared in the Bulsâr Range some three or four years ago are particularly healthy-looking and have attained a height of 4 feet.

131. In the Panch Mahâls Division no new experiments were attempted during the year. The Gulf-date palm is the only exotic which has taken kindly to this division, there being 98 plants alive.

(d). Exploitation of Major Forest Produce.

132. The method of coppice with standards is applied to the forests of the Thâna District, but the exploitation actually carried on partakes more of the character of improvement fellings. This mode of working is inevitable, considering that the condition of the forests is as irregular as it possibly can be, owing to their neglected state before Government took up their management, and since their acquisition even having not been treated under any rational system for a number of years. It is sought in this way to combine the advantages of certain reproduction with the improvement of the existing growing stock. The whole area is now divided into 282 blocks, to which a rotation of forty years is applied, so that the extent of the area set apart for exploitation annually is one-fortieth part of each block. According to this sub-division, exploitation of major forest produce was carried on in 225 compartments covering about 12,032 acres.

133. In the Surat Division the forests were exploited in different ways to suit local conditions. Selection and improvement fellings were undertaken in the Mândvi Range over an area of 347 acres yielding 13 trees, or 36 cubic feet to the acre. The method of treatment adopted in the Thâna Division was applied

to the four small isolated blocks in Bulsár, Chikhli and Mándvi ranges. And the leased forests of the Dángs continued to be worked on the old system, that of permitting contractors to remove a specified quantity of such description of timber as meets with their requirements.

134. Major forest produce throughout the year was chiefly exploited from occupied and waste lands in the Panch Mahâls Division, as there was a pressing demand to clear such lands to make them available for cultivation. Thus the forests enjoyed almost a complete rest which they are so much in need of.

(*e*). Extraction and Transport of Major Forest Produce by Land and Water.

135. The standing crop offered for sale in the several compartments laid out for the year finding ready purchasers, departmental agency is now very seldom employed in the Thána District for extracting major forest produce. The Department, however, is compelled under the orders contained in Government Resolution No. 7107, dated 6th September 1892, to make arrangements for felling such of them as cannot be disposed of in this manner, in order to supply small branch-wood material for ash manure and fuel for domestic purposes to the surrounding population. In the year under report, although there were 59 unsold coupes, departmental fellings were confined to 4 only. This was decided upon with the consent of the Revenue authorities after it had been shown that the local demand for "ráb" could be easily met from lands outside forest limits, and that owing to the inaccessible situation and poor growth of the coupes the operations would result in a heavy loss to Government.

136. Both land and water carriage is used in this district, the greater portion of timber and fuel being carted from the coupes to the nearest water way or railway station. The extraction of major produce from the forests of the West Thána Division hardly offers any difficulty, as they are situated, as a rule, within easy reach of the one or the other. In the East Thána Division until communications between the foot of the ghâts and the main lines of road and rail, running east and west, are improved, the removal of produce from the forests of Mokhâda, Khardi and Murbâd is impracticable, and, therefore, the coupes in these ranges are not sought after, and even when they are purchased, the contractors extract from them scarcely a fourth of the standing crop.

137. A scheme to facilitate the extraction of timber from the leased forests of the Dángs by a cheap means of communication as afforded by the Ambika River, which is estimated to cost Rs. 3,410 and which has been pronounced by the Executive Engineer, Surat, as "feasible" and "worth undertaking," is under consideration. The rocky obstacles to be met with in the channel are numerous, but the proposed outlay is small comparatively to the magnitude of the work, and, if sanctioned, a large saving will be effected in the cost of transport of timber from these outlying forests.

138. During the year under report, 2,350 bamboos were safely floated down as an experiment from Waghái to the Wághrech sale depôt on the sea-coast, a distance of 60 miles, out of a total of 2,950. The 600 which did not reach their destination were washed away to the sea owing to a heavy flood having suddenly overtaken them.

139. The forests of the Panch Mahâls have only had hitherto to supply the very limited demand of the principal towns of the district; but when the Godhra-Rutlam Railway extension is completed, other markets, chiefly in the Ahmedabad and Kaira Collectorates, will be opened out to them.

(*f*). Exploitation of Minor Forest Produce.

(*1*). *Extraction of Fodder.*

140. The grass from the fodder reserves and other closures was not extracted by departmental agency anywhere in this Circle. It was, as usual, put up for sale by tender or auction.

141. In the East Thána Division, the outside demand being small owing to the distance of the markets from the places of production and a clause having been recently inserted in the sale terms requiring that purchasers were not to interfere with the villagers if they wished to exercise the free privilege of removing grass for their own consumption, no sales were effected during the year.

142. The fodder reserves of the West Thána Division being natural meadows, and conveniently situated along the Bombay Baroda and Central India Railway line in the Umbargaon, Dáhánu, Máhim and Sálsette ranges for the export of grass to Bombay, showed a further tendency of still increasing in value, as will appear from the details given in the following comparative statement: —

No.	Range.	Area in		Revenue during		Average per Acre.		Remarks.
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	
		Acres.	Acres.	Rs.	Rs.	Rs. a. p.	Rs. a. p.	
1	Sálsette ...	1,387	1,276	767	749	0 8 10	0 9 4	
2	Máhim ...	2,173	2,173	9,517	10,701	4 6 0	4 14 9	
3	Dáhánu ...	2,800	2,800	505	955	0 4 9	0 5 0	
4	Umbargaon ...	256	256	408				
	Total ...	6,616	6,505	11,197	12,405	1 11 1	1 14 6	

143. In Surat the extraction of grass from closed areas is very limited, as its quality is very poor, and consequently the revenue derived therefrom is inconsiderable. The Dángs would produce an enormous quantity of grass. but for the determined way in which these forests are fired year after year. No appliances at our disposal, however, would make the export of grass remunerative from these forests to parts of Surat and Khándesh, in which fodder is scarce at times and always dear.

144. It appears that the Panch Mahál "birs" have not revived from the drought of 1887 which killed the more valuable species, and it is stated that the process of ousting the latter by the inferior kinds commenced then has not stopped yet. The receipts were, however, only Rs. 26 less than in the previous year; the figures being Rs. 1,329 as against Rs. 1,355.

(2). *Grazing.*

145. The number of animals of different kinds grazing free within forest limits cannot be stated accurately until the grazing rules published under Government Resolution No. 3595, dated 23rd May 1890, are uniformly applied to all the districts of this Circle and the owners compelled to take out passes in conformity therewith. The number shown in Form No. 55 (276,082) does not appear to have been exaggerated; however, it is probably under the mark than over when it is taken into consideration that the agricultural stock of the Thána, Surat and Panch Mahál districts comes to 1,128,003 according to the latest return. Thus by exercising the privilege of free grazing the agricultural population in the vicinity of the forests are richer by over (1¾) one and three-fourth lákhs of rupees.

146. A comparison is made, in the following statement, of the number of animals licensed for grazing at full and privileged rates during the year 1891-92 and 1892-93:—

No.	Division.	Number of Animals.		Amount of fees paid.	
		1891-92.	1892-93.	1891-92.	1892-93.
				Rs.	Rs.
1	East Thána	9,476	4,430	8,505	3,682
2	West Thána	2,411	1,018	3,141	1,477
3	Surat	2,689	739	3,135	853
4	Panch Mahál	17,597	5,231	15,734	4,307
	Total ...	32,173	11,418	30,515	10,319

The decrease in East Thána is very probably due to village officers having put too liberal an interpretation on the term "free cattle." In West Thána it would appear that the fees are being collected with more circumspection than in the previous year. The falling off in the Panch Mahâls is attributed to the exclusion of "foreign" cattle in the early part of the year.

(3). *Miscellaneous Produce.*

147. Satisfactory arrangements were made during the year to carry out the instructions issued in Government Resolution No. 9846, dated 15th December 1892, to regulate the collection of minor forest products in the Thána and Surat districts. The proposals made by the Divisional Forest Officers were, as a rule, accepted *in toto* by Revenue Officers, and will hardly require any modification for a few years to come.

148. In Thána it was thought proper, having regard to local conditions and past results, to keep the exploitations of myrabolams, hirdas (Terminalia chebula), apta leaves (Bauhinia racemosa), toddy palm leaves (Borassus flabelliformis) and fruits and beheda nuts (Terminalia belerica) under effective control, leaving the collection of other products, such as jungle fruits, honey, wax, gum, karvi, &c., free and unrestricted to the wild tribes and people of forest villages. Further, these classes were permitted to collect apta leaves and fruits and leaves of brab trees for their *bonâ fide* own use; the latter products were given at the discretion of the Divisional Forest Officers only.

149. The value of the myrabolams farm has considerably diminished in value during the year, as the fruit produced by trees standing on occupied uplands has ceased to be a part of the forest revenue owing to Government in their Resolution No. 10087, dated 23rd December 1892, having reserved no fruit-bearing trees. The receipts in consequence fell from Rs. 6,020 in 1891-92 to Rs. 907 in 1892-93.

150. Of the two trees, apta (Bauhinia racemosa) and tembhurni (Diospyros melanoxylon), whose leaves are used as wrappers for cigarettes by the people generally, the latter has been so much damaged in the past during the process of plucking that it was considered desirable to put a stop altogether to the farming of its leaves, and in order to further improve its growth, mutilated specimens to be met within the coupes are no longer to be reserved as standards, as was the practice in former years, for the sake of its fruit. The tembhurni coppices fairly, and if the injured and deformed trees are properly cut and trimmed, and the leaves protected, it ought to yield good timber when it reaches the exploitable age. The main utility of the apta trees lies in its leaf, it being not valuable as timber. It is also very hardy, stands a good deal of knocking about, and does not suffer to the same extent as the tembhurni from harmful treatment. The demand for its leaves is already fairly large, and there is a prospect of its increasing in proportion to the diminished supply of tembhurni leaves, and, therefore, its exploitation has to be restricted.

151. The revenue arising from the farm of toddy palm leaves and fruit varies from Rs. 1,858 to Rs. 1,435, and has shown a tendency to increase. There can be no objection to reserve these products, especially as the *bonâ-fide* wants of the wild tribes and the people of forest villages are safeguarded.

152. The receipts from beheda nuts has hitherto been small, but the demand may greatly increase in future, as this product is an important one. Moreover, it is not used locally, and in the interest of the trees it is necessary that the collection should be kept under control.

153. In three tálukas (Chikhli, Bulsár and Párdi) out of the four in the Surat Division the area under forests is very limited, and the condition of the country and the people so prosperous that it was not deemed advisable to apply the principles for regulating the collection of minor forest products laid down in the Resolution of Government quoted above. The Collector, Mr. Lely, conveyed his approval of this proposal in the following terms :—

"I have the honour to express my entire agreement that no concession should be made as to minor forest produce in the tálukas of Chikhli, Bulsár and Pardi. The area of the

forests there is so small, and the circumstances of the people such as to justify the exercise of rigid conservancy."

154. In the Mándvi Táluka all minor products were allowed to be collected and removed free of charge, with the exception of mhowra flowers, by the wild tribes and people of forest villages. A fee of four annas a maund was imposed on this product, and permission to tap toddy trees within forest limits when solicited was granted on the payment of a rupee per tree.

155. The arrangements for regulating the collection and sale of minor products under the procedure laid down in the Resolution quoted above in the forests of the Panch Mahals and those leased from the Rájas in the Dángs were not completed when the year closed.

CHATER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

DEPARTMENTAL OPERATIONS.

156. The following summary exhibits the quantity of timber and other forest produce worked out departmentally during the two years 1891-92 and 1892-93 :—

No.	Division.	Year.	In Cubic Feet.		In Number.	In Khandis.
			Timber.	Firewood.	Bamboos.	Hirdas.
						Kh. mds. lbs.
1	East Thána ...	1891-92 ...	17,247	...	...	143 7 0
		1892-93 ...	32,550	20,376	...	30 13 12
2	West Thána ...	1891-92 ...	10,839	79,602	...	70 3 0
		1892-93 ...	1,245	4,714	...	9 11 0
3	Surat	1891-92 ...	1,76,665	18,491	...	.....
		1892-93 ...	77,685	...	3,000	.....
4	Panch Mahals ...	1891-92 ...	25,415	210,700	...	.....
		1892-93 ...	4,070	10,700	...	.....
	Total ...	1891-92 ...	230,166	308,793	...	213 10 0
		1892-93 ...	115,550	35,790	3,000	39 24 12

157. In the two Thána divisions, variations in the yield of timber and firewood do not call for any special remarks; as their extraction depends on the number of unsold coupes of the year, it is necessary to exploit for the convenience of the privileged classes at the instance of the Revenue Department.

158. In the Surat Division there was less timber worked out, as it was deemed necessary to limit the exploitation in the Dángs to such quantities as could be disposed of during the year from the Wághrech and other sale depôts without running the risk of overfeeding the markets.

159. Departmental operations in the Panch Mahals were suspended to prosecute vigorously the clearing of reserved wood from occupied and other lands. The yield of the year shown in the foregoing statement represents the quantity of produce derived from boundary-line clearances.

160. Bamboos were only cut by departmental agency to permit of floating operations being undertaken down the Ambika River from Waghái in the Dángs to the Wághrech depôt on the sea-coast.

161. The hirda crop of the year was the worst hitherto known, and consequently the quantity collected was much less than in the previous year.

162. The following is an abstract of the details exhibited in Form No. 59:

No.	Division.	Balance on 1st April 1892.			Outturn of the year (15 months).			Total of Columns 5 and 8.	Disposed of during the year.			Balance on 30th June 1893.		
		Timber.	Fire-wood.	Total.	Timber.	Fire-wood.	Total.		Timber.	Fire-wood.	Total.	Tim-ber.	Fire-wood.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	12	13	15
		C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
1	East Thána	6,027	25	6,052	32,550	20,376	52,926	58,978	38,577	20,401	58,978	...	...	...
2	West Thána	4,335	45,837	50,172	1,245	4,714	5,959	56,131	4,236	48,301	52,537	1,344	2,250	3,594
3	Surat	56,025	...	56,025	77,685	...	77,685	133,710	130,003	...	130,003	3,707	...	3,707
4	Panch Mahals	956	...	956	4,070	10,700	14,770	15,726	4,206	8,400	12,606	820	2,300	3,120
	Total ...	67,343	45,862	113,205	115,550	35,790	151,340	264,545	177,022	77,102	254,124	5,871	4,550	10,421

It will be seen from the above figures that the departmental transactions of the several divisions were so far successful that the quantity worked out during the year of this report as well as the balances on hand from previous years were to a great extent disposed of. In Surat it is satisfactory to notice that the combination of traders, complained of in previous years, received a wholesome check chiefly owing to some of the sale depôts having been worked on the share system. This system can safely be applied to such forests as those of the Dángs which it is impossible to bring under a regular method of treatment under existing circumstances. Its one advantage is that contractors who undertake the supply are cautious not to stock the depôts with inferior timber for which there is no market. For it is stipulated in the contract agreement that as long as any material remains unsold it lies in the depôts at their risk.

Removal of Produce by Purchasers.

Timber and Firewood.

163. *Thána.*—The compartments of the year marked out for exploitation were put up for sale, as usual, in August. For the West Thána coupes competition amongst intending buyers being fairly keen, the majority of them were easily disposed of, and the offers accepted were a little higher than the year before. In East Thána the results were not so favourable owing to the inaccessibility of some of the coupes as well as to the inferior quality of the standing crop in others. A belief prevailed that all forest produce outside the Government forests would be handed over to the occupants, and this belief may also have had a disturbing effect on the market.

164. The following table shows the number and extent of the compartments, laid out for the year and similar information regarding those sold, with other details:—

No.	Division.	Compartments laid out.		Compartments sold.		Receipts.	Average Price per Acre.
		No.	Area in Acres.	No.	Area in Acres.		
			A. g.		A. g.	Rs. a. p.	Rs. a. p.
1	East Thána ...	122	6,759 20	85	4,711 20	92,553 0 0	19 6 11
2	West Thána ...	162	8,522 30	140	7,321 10	2,62,251 0 0	35 12 0
	Total ...	284	14,206 0	225	12,032 30	3,54,804 0 0	29 7 7

Although the price per acre in East Thána was only Rs. 19-7-0 per acre, the coupes which are conveniently situated, as those of the Bhiwndi Táluka, yielded a revenue of Rs. 26-1-2, while those in Mokháda only produced Rs. 11-6-6. It has been mentioned before (*vide* paragraph 135) that it was not considered necessary to exploit departmentally more than four coupes out of 59 remaining unsold.

165. The gross yield, in cubic feet, of timber and firewood extracted from the coupes is given below:—

No.	Division.	Teak, cubic feet.	Junglewood, cubic feet.	Firewood, including charcoal, cubic feet.	Remarks.
1	East Thána	511,918	255,959	661,993	
2	West Thána	1,148,247	687,528	2,954,850	
	Total ...	1,660,165	943,487	3,616,843	

These figures, it must be noted, have not been derived from actual measurement, but are fairly accurate as showing the amount of forest produce brought to export bandars and railway stations by contractors. The local demand, specially for timber, being small, it may be safely left out of calculation.

166. The material is roughly classified and estimated by Depôt officers on its removal, according to the following formulæ of conversion :—

Beam	...=32 cubic feet
First class rafter ...	...=14 „
Second class rafter ...	...= 6¼ „
Third class rafter ...	...= 3½ „
Piece	...= 3 „
Ordinary cart-load of firewood	...=45 „
Khandy of charcoal ...	...=50 „

167. Some coupes are well cleared, and not a stick remains—for example those of the Bassein Range, whereas in others, from which facilities of export are not so numerous, a considerable quantity of both timber and firewood is left. Such material of course has not been taken into account in the above statement.

168. In addition to the outturn from these regular operations, the quantity of firewood removed by privilege-holders and other permit pass-holders has been roughly estimated at 600,000 cubic feet.

169. *Surat.*—The quantity of timber and firewood removed by purchasers and consumers during the two years under comparison was as under :—

Year.	Timber, cubic feet	Firewood, cubic feet.	Total cubic feet.
1891-92	43,509	35,130	78,639
1892-93	68,690	30,739	99,429

The markets were not fed to the same extent as in the previous year by importation from the Thána forests, and, therefore, the demand for all descriptions of timber from the forests of the Dángs revived and continued brisk throughout the year.

170. *Panch Mahâls.*—The outturn of the year is compared with that of the preceding year in the following statement :—

Year.	Timber, cubic feet	Firewood, cubic feet.	Total.
1891-92	37,196	239,400	276,596
1892-93	208,068	242,281	450,349
Difference ...	+170,872	+2,881	+173,753

The timber worked out by purchasers and consumers was chiefly derived from lands outside forest limits, and prices ruled high. There is a slight falling off in the yield of firewood, due probably to a large quantity having been supplied in the previous year to the Godhra-Rutlam Railway Extension Works for brick and lime burning.

Bamboos.

171. The trade in bamboos was further developed, and the results of the year's operations show, in almost all the divisions, a considerable advance over the last year. The demand appears to be on the increase, notably in the Dángs. The yield and receipts of the two years were as under :—

No.	Division.	Bamboos removed, 1891-92.				Bamboos removed, 1892-93.				Remarks.
		Cart-loads.	Head-loads.	Number.	Amount realized.	Cart-loads.	Head-loads.	Number.	Amount realized.	
					Rs.				Rs.	
1	East Thána	740	1,843	303,992	7,439	1,086	6,386	288,673	9,004	
2	West Thána	8,560	...	240,887	10,663	8,655	5,525	*2,027,223	12,705	* Large number of bundhis were removed.
3	Surat	...	...	727,032	16,306	...	...	1,136,155	25,364	
4	Panch Mahális	99	4	143,378	1,661	193	...	217,272	2,899	
	Total ...	9,399	1,847	1,415,289	36,119	9,934	11,911	3,669,323	49,972	

Minor Produce.

172. The following comparative statement will show that the maxim laid down in Government Resolution No. 9846, dated 15th December 1892, that it is not necessary to make a revenue from minor forest produce, has been duly observed in this Circle :—

No.	Division.	Value realized in 1891-92.	Value realized in 1892-93.
		Rs.	Rs.
1	East Thána	2,267	655
2	West Thána	4,120	2,475
3	Surat	2,176	2,103
4	Panch Mahális	1,942	2,371
	Total ...	10,505	7,604

Free Grants of Forest Produce.

173. The following is a statement showing the free grants of timber made during the last two years in the several divisions of this Circle under the sanctioning authority of the Commissioner, N.D. :—

No.	Division.	Value of the free grant during 1891-92.	Value of the free grant during 1892-93.
		Rs.	Rs. a. p.
1	East Thána	652	378 8 0
2	West Thána	...	49 12 0
3	Surat	15	703 0 0
4	Panch Mahális	535	729 4 0
	Total ...	1,202	1,860 8 0

CHAPTER IV.

FINANCIAL RESULTS.

174. Financially the results of the year 1892-93 may be considered satisfactory, as they compare very favourably with those of 1890-91, the best on record. In that year the gross receipts and net revenue were respectively larger by Rs. 2,000 and 5,000. It must be remembered that the collection of minor forest produce was not then limited to the same extent as it was in 1892-93, and the capital and the establishment charges were also necessarily less.

175. The gross revenue, expenditure and surplus of the Northern Circle for the two past years were :—

Year.	Revenue.	Expenditure.	Surplus.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1891-92	6,14,271 5 1	2,43,194 12 3	3,71,076 8 10
1892-93	6,35,448 10 2	2,69,286 6 11	3,66,162 3 3

Owing to the sales of timber, bamboos and other forest produce removed direct from the forests being larger, especially in the Dangs, and to prices obtained for the wood cut on revenue lands in the Panch Mahâls Division being exceptionally high, expenditure of the year was very fairly balanced by the swollen receipts.

176. The gross revenue of 1892-93 was more by Rs. 21,177 than that of 1891-92, but the net revenue shows a decrease of Rs. 4,914. This falling off is considerably less than was expected, and would have been fully covered if such a large sum as Rs. 28,540 had not been spent on the acquisition of land for forest purposes during the year under report.

177. The distribution of receipts among the several divisions compared with that of the previous year is exhibited in the following statement :—

No.	Division.	Receipts during 1891-92.	Receipts during 1892-93.
		Rs. a. p.	Rs. a. p.
1	East Thána	1,27,438 8 1	1,23,649 0 0
2	West Thána...	3,05,430 8 11	3,08,692 12 8
3	Surat	1,04,299 4 4	1,20,014 3 0
4	Panch Mahâls	77,102 15 9	83,048 4 2
5	Bombay Forest Survey	.....	44 6 4
	Total ...	6,14,271 5 1	6,35,448 10 2

There is a small decrease of Rs. 3,789 in the East Thána Division due to realizations under I. *e.* and II. *e.* having fallen off considerably. If the crop of hirdas had been an average one, the loss would have been converted into profit.

178. The difference in revenue (Rs. 3,262) though not large is in favour of the year under report in the West Thána Division and is the highest ever obtained. If a sum of about Rs. 3,000 had not remained unadjusted through an oversight, the results would have been even more satisfactory than they were.

179. The receipts of the Surat Division are Rs. 15,715 in excess of the actuals of the past year, and this rise is due to the larger quantity of timber and bamboos removed from the leased forests in the Dángs by wood merchants and to the recovery of a sum of Rs. 5,300 left outstanding at the close of the year 1891-92.

180. In the Panch Mahâls Division the increase in receipts amounts to Rs. 5,945. This excess over the previous year is attributable to prices having

risen owing probably to the importations of timber and firewood from the forests of the adjacent Native States having fallen off through reckless management in the past.

181. The following statement shows the expenditure for the two years under each main head:—

Head of Service.	Actual amount of expenditure during 1891-92.	Actual amount of expenditure during 1892-93.	Increase.	Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A I	21,153 14 8	7,962 5 5	.....	13,191 9 3
A II	13,767 10 11	12,040 1 0	.....	1,727 9 11
A III	82 15 5	57 7 0	.....	25 8 5
A IV	.....	.....	.....	.....
A V	13,635 1 6	16,963 4 6	3,323 3 0	.....
A VI	371 5 2	1,303 12 6	932 7 4	.....
A VII	5,463 10 4	4,136 4 1	.....	1,327 6 3
A VIII	44,756 1 2	70,783 2 4	26,027 1 2	.....
A IX	1,115 10 1	762 8 2	.....	353 1 11
Total A ...	1,00,346 5 3	1,14,008 13 0	30,287 11 6	16,625 3 9
B I	1,18,767 1 6	1,30,544 2 9	.....	.....
B II	18,203 15 9	18,889 14 1	.....	.....
B III	5,877 5 9	5,343 9 1	.....	.....
Total B ...	1,42,848 7 0	1,55,277 9 11	.....	.....
Add A ...	1,00,346 5 3	1,14,008 13 0	.....	.....
Grand Total ...	2,43,194 12 3	2,69,286 6 11	.....	.....

Notwithstanding that during the year the expenditure under one main head alone, *viz.*. A. VIII.—Demarcation, Improvement and Extension of Forests, was Rs. 26,027 over that of the previous year, the total of the Circle shows an increase of Rs. 13,663 only. This result could only be obtained by utilizing available savings, and cutting down expenses on other heads, as the urgency of completing the purchase of all the land proposed to be acquired on the catchment area of the Tánsa Lake before the 31st March 1893 could not be neglected. The demands of the special officer being so much in excess of the sum allotted for the purpose, no other way was possible for meeting his requirements. Fortunately there was no necessity of undertaking departmental fellings and other operations to the same extent as last year in the two Thána and Panch Maháls Divisions. In the Dángs also the difficulty of procuring labour being greater than usual owing to cholera having broken out, the contemplated departmental operations could not be carried out in their entirety by the close of the year. The savings thus available under A. I. and the retrenchments made under other main heads went, therefore, towards meeting the high expenditure of Rs. 70,783 under A. VIII. incurred during the year.

182. The charges under B.—Establishments show an increase of Rs. 12,429 over last year, which was to be expected seeing that no part of the Direction charges were debited to the previous year.

CHAPTER V.

FOREST ADMINISTRATION.

ADMINISTRATIVE CHARGE.

183. An important feature in the forest administration of the Presidency was the division of the old Northern Circle into two under the authority of Government Resolution No. 8315, dated 22nd October 1892.

184. The changes effected in pursuance of this separation have been fully described in the introductory chapter, and, therefore, it is not necessary to refer to them here.

185. The Honourable Mr. A. T. Shuttleworth, Conservator of Forests, 1st Grade, was in administrative charge of the four divisions comprised in this Circle up to the 5th of November 1892, when I relieved him of it.

186. I hope I won't be considered presumptuous if I take this opportunity of recording that all officers in this Circle, superior and subordinate, have keenly felt the severance from Mr. Shuttleworth, under whom they had the good fortune to serve for a good many years, and whom they regard officially as well as socially with affection and respect.

CONTROLLING CHARGES.

187. No changes were made in the controlling charges beyond those referred to in paragraph 21. The old designations North and South Thána were certainly misnomers, as the two divisions overlapped one another, and the alteration of names to east and west and redistribution of executive charges effected during the year were very desirable.

188. The controlling charges were held by the following officers for the periods shown against their names :—

No.	Division.	Name of Officer.	Rank.	Designation.	Period of holding charge.	
					From	To
1	East Thána.	Mr. L. S. Osmaston ...	Assistant Conservator of Forests, 1st Grade.	Divisional Forest Officer.	1st April 1892 ...	21st July 1892.
		,, G. P. Millett ...	Deputy Conservator, 4th Grade ...	Do. ...	22nd July 1892 ...	10th January 1893.
		,, C. Greatheed ...	Do, 3rd Grade ...	Do. ...	11th January 1893	30th June 1893.
2	West Thána.	,, G. P. Millett ...	Do. 4th Grade ...	Do. ...	1st April 1892 ...	Do.
3	Surat...	,, R. H. Madan ...	Extra Assistant Conservator, 2nd Grade.	Do. ...	Do. ...	15th Augnst 1892.
		,, W. A. Wallinger...	Do. do. ...	Do. ...	16th August 1892.	12th April 1893.
		,, F. R. Dasai ...	Deputy Conservator, 1st Grade ...	Do. ...	13thApril 1893 ...	31st May 1893.
		,, W. A. Wallinger...	Extra Assistant Conservator, 2nd Grade.	Do. ...	1st June 1893 ...	30th June 1893.
4	Panch Mahals.	,, H. W. Keys ...	Deputy Conservator. 4th Grade ...	Do. ...	1st April 1892 ...	12th May 1892.
		,, W. F. D. Fisher...	Assistant Conservator, 2nd Grade.	Do. ...	13th May 1892 ...	30th June 1893.
5	Working Plans.	,, T. B. Fry	Deputy do. do. ...	Do. ...	1st April 1892 ...	Do.

189. Prior to and since the formation of this Circle leave of absence was granted to the following officers :—

No.	Division.	Name of Officer.	Designation.	Kind of Leave.	Period of Leave.	Government Resolution sanctioning the leave.
1	Panch Mahals.	Mr. H. W. Keys ...	Divisional Forest Officer.	Furlough	18 months.	.....
2	East Thána ...	,, L. S. Osmaston ...	Do, ...	Leave on medical certificate.	6 months ...	Government Resolution No. 3216, dated 9th August 1892.
3	Surat	,, R. H. Madan ...	Do, ...	Privilege leave ...	2 months ...	Government Resolution No. 3222, dated 10th August 1892.
4	Do.	,, W. A. Wallinger...	Do. ...	Do ...	1 month and 25 days.	Government Resolution No. 3194, dated 3rd May 1893, and Government Resolution No. 3888, dated 29th May 1893

SUB-DIVISION CHARGES.

190. The sub-division charges under Extra Assistant Conservator of Forests were remodelled and their designations also changed following the redistribution of executive charges in the Thána District, as shown below :—

No.	Division.	Name of Sub-Division.	Names of Ranges comprising the Sub-Division.
1	East Thána ...	Sháhápur ...	Sháhápur, Khardi, Murbád, Mokháda.
		Kalyán	Kalyán, Bhiwndi and Váda.
2	West Thána ...	Dáhánu	Dáhánu, Umbargaon
		Bassein	Bassein, Máhim, Sálsette.

191. The Dáhánu Sub-Division is in abeyance owing to the transfer of Mr. Robinson, Extra Assistant Conservator of Forests, together with his office establishment to the Southern Circle. It is to be regretted that, owing to the paucity of officers available, the full strength of four sub-division officers was not maintained for a portion of the year in the Thána District, in which extensive felling operations are carried on all throughout the dry season. The following officers held charge of the several sub-divisions during the year :—

No.	Division.	Name of Officer.	Rank.	Designation.	Period of holding charges.	
					From	To
1	East Thána.	Mr. A. N. Mastey ...	Extra Assistant Conservator, 4th Grade.	Sháhápur Sub-Division Forest Officer.	1st April 1892 ...	30th June 1893
		,, W. F. D. Fisher ...	Assistant Conseraator, 2nd Grade ...	Kalyán do. ...	Do. ...	10th May 1892.
		,, L. S. Osmaston ...	Do. 1st Grade ...	Do. do. ...	11th May 1892 ...	2nd June 1892.
		,, K. B. Phadke ...	Extra Assistant Conservator, 4th Grade.	Do. do. ...	3rd June 1892 ...	30th June 1893.
2	West Thána.	,, A. C. Robinson ...	Do. ...	Dáhánu do. ...	1st April 1892 ...	14th January 1893
		,, V. D. P. Rebeiro ...	Do. ...	Bassein do. ...	Do. ...	30th June 1893.
	Surat.	,, K. B. Phadke ...	Do. ...	Surat do. ...	Do. ...	19th May 1892.
		,, R. H. Madan ...	Do. 2nd Grade...	Do. do. ...	20th May 1892 ...	27th May 1892.
		,, C. G. Dalia ...	Do. 4th Grade...	Do. do. ...	28th May 1892 ...	30th June 1893.

EXTERNAL RELATIONS OF THE FOREST DEPARTMENT.

192. I have much pleasure in acknowledging the cordial assistance and support which I have invariably received from the Collectors. If it had not been for their hearty co-operation, my task in conducting the administration of this Circle would have been beset with greater difficulties than it actually was, especially as I was new to the Konkan and Gujarát, and I had consequently much to learn when I took over charge.

193. The relations between the local Revenue and Forest officers were maintained on a harmonious footing throughout the year, and the Divisional Forest Officers one and all have displayed good sense and tact in their dealings with their respective Collectors.

ESTABLISHMENTS AND THEIR RECRUITMENT.

194. The Divisional Forest Officer, Surat, has experienced considerable difficulty in recruiting the lower protective staff chiefly for the forests of the Dángs and Mándvi ranges. These localities being notoriously unhealthy, the better class of men—Maráthás from the Deccan and the Konkan—have a perfect aversion to serve there. In order that they may be induced to do so it has been proposed to Government to sanction the grant of a special local allowance, and it is hoped by these means it will be possible to supplant the local men, who have been found inefficient, lazy and untrustworthy.

195. All the Collectors support the Divisional Forest Officers in recording that the present subordinate establishments generally are exceedingly inadequate. Looking at the magnitude of the tasks set them it is not surprising that the general conduct of the lower protective staff leaves much to be desired. But there is no doubt that with an establishment of the strength demanded by the work, and justified by the revenue derived from the forests, a considerable improvement in this direction might be expected.

FOREST INSTRUCTION.

196. Mr. Gleadow, Professor of Forestry at the College of Science, Poona, conducted his students on a tour over some of the forests, plantations and depôts in the Sháhápur Range during the month of December 1892. Mr. Millett, who at the time had not been relieved of the East Thána Division, accompanied the party for a few days and helped the Professor in explaining to the students the different operations which were in progress.

GENERAL REMARKS.

197. An important and explicit ruling came out during the year on the vexed question of the disposal of trees in occupied lands in the Thána and

Kolába districts. The final orders of Government therein expressed are that "in all occupied lands, whether classed as rice, garden, rabi or varkas the right to all royalty trees, *viz.*, teak, blackwood and sandalwood, and, in the tálukas coming under the Sanján and Kolvan settlements, tiwas vests in Government. .... As regards rice, garden or rabi lands Government will, as an act of grace and favour, waive its rights to trees whether reserved or unreserved standing on such lands..... But in varkas lands the felling of teak, blackwood and sandalwood trees and tiwas where reserved, without the permission of the Collector, is strictly forbidden..... As regards unreserved trees..... no claim should be made to them on varkas or other occupied lands."

198. These orders may affect the timber trade of the Thána District hereafter, but they have not done so this year (1893-94), as the departmental sales held last August have been successful beyond all precedent. Not only were the prices offered higher than ever before, but the percentage of coupes remaining unsold was much smaller. The demand was even so great that offers were pouring in, after the year's sales had been held, to take up the unfelled compartments of the years 1889-90 and 1890-91. Moreover, it is satisfactory to notice that the Collector of Thána has, through his Assistants and subordinates, warned the occupants that if by reckless fellings in their holdings they deprive themselves of ash-manure material they must not look to Government to make good the supply in after years from State forests. The removal of royalty trees is also regulated in a satisfactory manner. Through the courtesy of the Revenue head of the district every application is referred to the Forest Department in order that its officers may have the means of judging of each case on its merits before it is disposed of.

199. The occupants have not so far abused the liberality of Government, and as long as the measures introduced by Mr. Sinclair to safeguard the interests of the State are carefully observed, there is no fear of the concessions proving otherwise than beneficial to the people.

200. Having had no opportunity of gaining any experience whatever of the Konkan and Gujarát forests previous to my appointment to this Circle, my first tour was planned both for the purpose of instruction as well as of inspection. I had arranged to visit all the divisions before the rains, and if I had not been compelled to wait in Surat until my personal office establishment could be organized, I might have had no difficulty in carrying out my original intention. But the supervision of the extensive and important timber and other operations in the Thána and Dángs forests took all the time at my disposal, and consequently I had to defer my inspection of the Panch Maháls forests to another year.

201. Leaving on the 5th December, after having got together a small establishment of one clerk and three peons from the sanctioned staff, I marched through the Bulsár Range accompanied by the Divisional Forest Officer for a few days and reached Bhilád in the Thána District on the 17th. During the time Mr. Wallinger and I were together we took the opportunity of taking stock of the old timber in the Wághrech sale depôt, as it appeared to me that the subordinates were perhaps trying to make too much of a sudden flood which had swept over the depôt in the rains to gain some dishonest purpose. This work resulted in the discovery of most of the timber which at first was reported to have been washed away to the sea and could not be found. From the 18th to the 23rd the important forests and depôts in the Umbargaon Range were visited and the camp was moved by rail during the Xmas week to Malyán. In the meantime arrangements for temporarily organizing my office were completed, and the clerks and peons seconded for duty from the Central Circle reported themselves to me after the holidays.

202. Going through the Dáhánu and Máhim ranges between the 3rd and the 14th January, I entered the Bassein Range on the 15th. Mr. Millett, Divisional Forest Officer, West Thána, joined me on the following day and conducted me through this range. What struck me most was that whereas, in the other ranges of his division I had already gone through, contractors had no intention of utilizing some of the inferior kinds of wood, the Bassein coupes

showed that every stick would be removed to which they were entitled under the terms of their agreements. On the 26th Mr. Greatheed, Divisional Forest Officer, East Thána, met me and went with me as far as Bhiwndi, where I had an opportunity of conferring with the Collector and the Divisional Forest Officer, Working Plans, on several important questions relating to the general forest administration of the Thána District. I left Bhiwndi on the 3rd February after paying a flying visit to the catchment area of the Pokhran Lake, which it is proposed to convert into meadow land for improving the quality of the water supplied to the town of Thána.

203. After travelling rapidly through the Kalyán and Murbád ranges, I reached Tánsa on the 20th February, and in company of Mr. Greatheed, who had gone there before me, inspected most of the forests round the lake. We then proceeded *viá* Átgao to Khardi and from there advantage was taken of the Holi holidays to make a flying tour of inspection in the Mokháda Range from Kasára northwards to Koshimshet, the two offices and heavy baggage moving meanwhile to Suryámal, where they were rejoined on 6th March. From there I descended the Okde Ghát by the excellent road which has recently been completed by the Public Works Department. Mr. Greatheed following me, as there was some difficulty in procuring a sufficient number of carts for both establishments, and arrived at Váda on the 10th. Here a halt of three days was made to enable the two Divisional Forest Officers to effect the transfer of the executive charges sanctioned in Government Resolution No. 985, dated 4th February 1893.

204. From Váda I marched rapidly through the eastern portion of the Dáhánu and Umbargaon ranges which I had not been able to visit at the commencement of the season, and reached Sanjan on the 27th.

205. The whole camp was conveyed by rail to Bilimora during the Easter holidays on its way to the Dángs, arriving at Waghái on the 12th April. I did not leave the Dángs till the 22nd May, and would have done so some ten days earlier if I had not been prostrated by illness. I do not, however, regret the long time spent in these forests, however, as it enabled me to inspect thoroughly this valuable property and the timber operations carried on therein.

206. Mr. Wallinger having proceeded on privilege leave the day after my arrival at Waghái, and no officer being available to take his place, I performed divisional duties, in addition to my own, which also gave me an excellent opportunity of devoting special attention to the several works in progress. I regret to say that I found the fire discipline more lax than I expected to find it, and it was pointed out to the subordinates that, notwithstanding the difficulties they have to contend with, the wholesale devastation I saw wherever I went, would have been avoided if they had not shown such complete apathy in the matter of fire conservancy.

207. I also noticed that the timber contractors were allowed too much their own way, and the leniency shown to them hitherto was liable to be grossly abused, if not checked, considerably. It appears to have been the rule in the Dángs to allow contracts of one season to run on indefinitely, and it seemed to me that when a requisition was sent in, it was an understood thing that, if the contractor for any reason whatever was unable to remove the material he had purchased within the time allowed him, he would be permitted to take it away as it suited his convenience. The effect of such a lax procedure was that the grantees indented for double or treble the quantity of timber or bamboos which they knew they could not cut and remove within a fixed period, and it was impossible for the Divisional Forest Officer to exercise any check whatever on their operations. This state of affairs was remedied during the year, and the traders now understand that no extension of time will be granted unless on very special grounds.

208. As there were symptoms of the monsoon setting in earlier than usual, I went hurriedly through the reserves near the town of Mándvi after leaving the Dángs, and arrived at Surat on the 28th May. Till the 3rd of the following month I stayed in Surat to give back charge of his division to Mr. Wallinger and to confer with Mr. Lely, the Collector, principally on the subject of establishing a wood depôt in that city, as the inhabitants were bitterly

complaining of the high price at which wood was selling in the market owing to the monopoly enjoyed by middlemen, who bought up all the wood as it came in and put their own price on it.

209. Before settling down for the rains at Bándra, my head-quarters, on the 9th June and while the two camps, both office and private, were being conveyed by rail, I paid a flying visit to Godhra in the Panch Maháls and inspected the Divisional Forest Office, and had an interview with the Collector on forest matters in general.

210. The work performed by Mr. Millett, Divisional Forest Officer, West Thána, during the period of this report, both in and out of doors, cannot be commended too highly. For six months he was in charge of both the Thána Divisions, whose very onerous duties would have severely tried the patience of a less energetic and zealous officer. One important work he has carried through successfully during the year, notwithstanding that he had very little time to spare for special work of any kind, was the compilation of the rules and standing orders relating to the Thána District. Mr. Sinclair's approbation of his services are couched in the following terms :—

"The Collector has much pleasure in recording his experience of its" (referring to the abstract) "value; and his sense of the trouble taken with it and with all his work by Mr. Millett; the good sense and good temper which have made that officer's administration of his division (and during many months of the two divisions) the most successful ever known to the district."

211. Mr. Greatheed prior to his appointment to East Thána was comparatively new to the Konkan and, therefore, his time was fully occupied in actively moving about his charge and making himself acquainted with the forests of his division before the year closed. The Collector writes :—

"There has been no serious complaint from any one in the division, and on the whole I have good reason to be well satisfied with the year's work."

212. This was the first occasion in Mr. Wallinger's term of service that he had to conduct the duties of a Divisional Forest Officer solely on his own responsibility, and, therefore, it gives me much pleasure to record that his management of the Surat and Dángs forests was not only successful but very praiseworthy. Mr. Lely, the Collector, observes in his covering memorandum that

"he considers that much credit is due to Mr. Wallinger for the zeal and intelligence with which he had done his work."

And in transmitting the same the Political Agent, Khándesh, states :—

"I have not been in the Dángs yet, and therefore cannot, I am sorry to say, make any remarks worth having on that part of Mr. Wallinger's report that deals with them. I will ask Mr. Dodgson, the present Dáng Demarcation Officer, how it is that the position of the pillars does not correspond with their place in the maps. The objection to notifying the Dáng forests as reserved forests under the Act is, I imagine, that the Dángs are foreign territory and that the forests are not Government property. But there is not, I think, any reason why we should not treat the Dáng people as though the Act were in force there just as we treat them as though the Abkári Act were in force there. That people will not voluntarily serve in the Dángs for pay that would be enough for them elsewhere, is quite certain: and so I think the pay of Dáng servants should be improved. And I join with Mr. Lely in saying that, so far as I have seen, Mr. Wallinger deserves much credit for his zeal and intelligence."

213. Mr. Fisher was placed in charge of the Panch Maháls Division when he had been only a very short time in the presidency, and consequently he was ignorant of the language and the people of the district he was called on to administer. He has gained some experience since then, and promises to be an efficient controlling officer.

214. The very arduous duties of a Working Plans Officer have been conducted by Mr. Fry in this Circle with his usual care and devotion to duty.

215. As a body, the Sub-Division Officers have done their work fairly well. Mr. Rebeiro in West Thána and Mr. Chunilál Gulábchand Dalia deserve to be specially mentioned for having worked sensibly and conscientiously.

216. The services of the following subordinates have been recognized as approved in the several divisional reports :—

1. Shaik Abas Shaik Alli Potrik
2. Husan Alli Mahomed Alli.
3. Mancherji Byramji Merchant.
4. Shaik Ahmed Nur Mahomed.
5. Sadáshiv Pándurang Limaye.
6. Ganesh Rámchandra.
7. Shaik Usman Shaik Idrus.

217. The Divisional Offices have been working with reduced strength for a part of the year owing to the transfer temporarily of some of the clerks to the Circle Office, and all the controlling officers are unanimous in reporting that the extra work thrown on them in consequence has been cheerfully performed.

218. The clerks of my personal office have worked industriously under the able superintendence of Mr. Shiwarám Bhikáji Rangnekar, the Head Clerk.

219. The records and accounts of all the Divisional Forest Offices were examined during the year, and no serious mistakes were discovered.

220. The black list of the year is a fairly heavy one. One executive officer was dismissed and another degraded from ranger Rs. 60 grade to forester on Rs. 40. Both of them appealed to Government, who refused to interfere with the decision of the head of the Department. In addition to the above, the services of 30 forest guards were dispensed with.

221. The mortality amongst the subordinate staff was not so heavy as in the previous year, the figures of the latter being 20 against 11 in 1892-93. The health of the subordinate establishments was fairly good, notwithstanding that cholera prevailed in parts of Thána, Surat and the Panch Maháls.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

Camp Bápsai, Thana District,
25th November 1893.

B 827—10 NC

FORM No. 46.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Area of Reserved Forests, 1892-93.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11
East Thána ...	Thána ...	.....	167,605	261·565	...	*233	167,372	261·332	Nos. 3915, 5th May 1892; 7670, 27th September 1892.	* Disforested for the Tánsa Lake.
West Thána ...	Thána ...	.....	259,610	405·410	...	...	259,610	405·410	.....	Táluka Wáda is included in this Division.
Surat ...	Surat ...	.....	43,673	68·153	229	...	43,902	68·382	No. 4751, 7th June 1892.	
Panch Mahals...	Panch Mahals.	.....	126,396	197·316	13,895	*135	140,156	218·636	Nos. 6867, 27th August 1892; 8418, 26th October 1892; 8590, 2nd November 1892; 9571, 7th December 1892, 366, 13th January 1893; 1149, 9th February 1893; 6255, 3rd August 1892; 9756, 13th December 1892; 2004, 17th March 1893; 2579, 12th April 1893; 368, 13th January 1893.	* Rectification of 3 acres caused by the actual measurement of the area disforested (*vide* Commissioner, N.D.'s Vernacular No. 136, dated 5th November 1890.
		Total ...	597,284	933·164	14,124	368	611,040	954·480		

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 46 A.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Area of Protected Forests, 1892-93.

Division or Range.	Civil District or Territory.	Name of Forest.	AREA ON 1ST APRIL 1892.		ADDED DURING THE YEAR	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 30TH JUNE 1893.		Number and date of Notification of addition or transfer.	REMARKS.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11
East Thána ...	Thána ...	.....	209,692	327·412	...	*1,333	208,359	325·359	Nos. 8510, 29th October 1892; 678, 25th January 1893; 5886, 19th July 1892; 6578, 16th August 1892.	*Disforested for the Tánsa Lake. Táluka Wáda is included in this division.
West Thána ...	Thána ...	.....	175,334	273·614	...	...	175,334	273·614	.....	
Surat ...	Surat ...	.....	...	...	...	...	...	...	.....	
Panch Maháls .	Panch Maháls.	.....	...	...	...	...	...	...	.....	
		Total ...	385,026	601·386	...	1,333	383,693	599·333	.....	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 47.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Statement showing the Progress made in, and the Expenditure incurred on, Forest Settlements during 1892-93.

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	Areas finally settled during the year.						Areas undergoing Settlement.						Remarks.
			Number and date of Government order according final sanction to the settlement.	Name of Forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
						In Forest accounts.	In other accounts.		Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In Forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		Sq. m.				Rs. a. p.	Rs.	Rs. a. p.					Rs.	Rs.	
East Thána	Thána	208	No. 3915, dated 5th May 1892. No. 7670, dated 27th September 1892. No. 8510, dated 29th October 1892. No. 678, dated 25th January 1893. No. 5886, dated 19th July 1892. No. 6578, dated 16th August 1892.	Disforestment of certain Reserved and Protected Forests in Sháhápur Táluka.	2¼	.....	...	...	Sháhápur and Murbád.	376¾	Murbád ...	141	1,459	3,160	
West Thána... ...	Thána	228	.....	.....	.....	.....	...	...	Dáhánu, Máhim ...	451	Máhim	199	4,745	8,492	Wáda is included in West Thána.
Surat...	Surat	63·519	No. 4751, dated 7th June 1892.	Mándvi	229 acres.	.....	...	...	.....	...	.....	...	.....	.....	
Panch Mahás ...	Panch Mahás ...	198	No. 6867, dated 27th August 1892. No. 8510, dated 2nd November 1890.	Káiol	·22	71 6 6	...	3 4 0	Dohad, Jhálod ...	115	.....	....	* 435	.....	* This amount is on account of compensation paid for occupied lands situated within forest limits in Dohad Táluka.
	Tota ...	697·519			24 1/2	71 6 6	...	3 4 0		942¾		340	6,639	11,652	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

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FORM No. 48.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Record of Demarcation and Maintenance of Boundaries during 1892-93.

No.	Division.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries not demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure of Demarcation during the year.		Remarks.
									On new works.	On repairs.	
		Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. a. p.	Rs. a. p.	
1	East Thána	57	154	134	345	151	3	499	346 3 0	34 9 9	
2	West Thána	70	30	357	387	604	170	1,161	525 10 0	185 0 0	
3	Surat*	421	...	115	536	224	76	836	4,249 5 4	.....	*Surat includes the Dángs.
4	Panch Maháls	77½	324⅕	4⅗	405 9/10	267⅙	79	752 1/15	406 2 0	.....	
	Total ...	625½	508⅕	610⅗	1,673 9/10	1,246⅙	328	3,248 1/15	5,527 4 4	219 9 9	

Camp Dahisar, Thána Districts,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 49.

FOREST DEPARTMENT No. 17 PARTY (BOMBAY FORESTS).

Statement of Forest Areas Surveyed and under Survey during the year 1892-93.

IN THE NORTHERN CIRCLE.

Division.	Areas Surveyed and under Survey during the year.																								Areas remaining to be taken under Survey.	Total Forest Area at end of the year as per Form No. 46.	COST.			REMARKS.
	Special Surveys—Maps on 4" scale or over, by Survey of India Department or Forest Survey Branch.								*Ordinary, included in District Surveys.*								*Chain and compass or other surveys by local officers.*													
	WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.								
	With details of growing stock.		Without details of growing stock.		Total Cost.	Previous.	Of the year.	Total Cost.	With details of growing stock.		Without details of growing stock.		Total Cost.	Previous.	Of the year.	Total Cost.	4-inch or over.		Under 4-inch.		Total Cost.	Previous.	Of the year.	Total Cost.			Previous.	Of the year.	Entire cost of all Surveys to end of the year.	
	Previous.	Of the year.	Previous.	Of the year.					Previous.	Of the year.	Previous.	Of the year.					Previous.	Of the year.	Previous.	Of the year.										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
				Sq. m.	Rs. a. p.																									
WEST THA'NA 8".																														
Triangulation ...	...	...	...	165	2,559 7 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	From 1st October 1892 to 30th September 1893.
Traversing	...	...	...	10	154 15 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Detail...	...	...	...	45	7,060 0 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
EAST THA'NA 8".																														
Detail...	...	...	...	15	2,339 7 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total ...	...	...	...	...	12,113 15 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 50.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Progress made in Working Plans, 1892-93.

Division.	AREAS FOR WHICH WORKING PLANS HAVE BEEN COMPLETED.		AREAS FOR WHICH WORKING PLANS ARE BEING COMPILED.		Areas for which Working Plans have still to be taken in hand.	Total Forest Area, as in Form No. 46.	Entire Cost, per square mile, of Working Plans completed.	REMARKS.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.				
1	2	3	4	5	6	7	8	9
		Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
East Thána...	...	72	...	113	345	530*	8,857†	*These figures represent area of forests as scaled, and, therefore, they will not compare with figures in Form No. 46. †The Divisional Forest Officer Working Plans and his establishment were for the most part of the year employed in the Thána District. As the charges are debited in lump, separate figures for each division are not available.
West Thána	...	...	92	...	345	437*		
Surat	...	...	...	...	68·382	68·382	.....	
Panch Mahals	...	...	...	...	218·633	218·633	.....	
Total ...	...	72	92	113	977·375	1,254·375	8,857	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 51.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Communications and Buildings during 1892-93.

Division.	NEW WORK UNDERTAKEN DURING THE YEAR.						REPAIRS EXECUTED DURING THE YEAR.					
	Buildings.		Roads and Paths.			Total Expenditure on new work.	Buildings.		Roads and Paths.			Total Expenditure on Repairs.
	Description of Building.	Expenditure incurred.	Road or Path and object of the same.	Length of Road or Path.	Expenditure incurred.		Nature of Repairs.	Expenditure incurred.	Nature of Repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.
East Thána.	Kalyán Range— 4 Cattle-pounds ...	74	.....	...	...	74	For thatching, &c., 21 Forest guards' huts ...	62	.....	...	...	62
	Shahápur Range— 2 Cattle-pounds ...	41	.....	...	...	41	For thatching, &c., 24 Forest guards' huts ...	110	.....	..	...	255
	Sháhápur Range— 1 Forest depôt at Wásind	231	.....	...	...	231	For plastering, white-washing &c., forest bungalow at Tánsa	145				
	Murbád Range— 3 Cattle-pounds ...	48	.....	...	...	48						
	2 Forest guards' huts.	20	.....	...	...	20	For thatching, &c., 32 Forest guards' huts ...	101	.....	...	...	101
	Khardi Range— 3 Cattle-pounds	47	Projecting a road from Dápur to Kochála to facilitate removal of timber from the outlying forests.	3	11	102						
	1 Forest depôt at Kasára	34					For thatching, &c., 24 Forest guards' huts ...	95	.....	...	..	95
	1 Forest guard's hut.	10										
	Bhiwndi Range— 4 Cattle-pounds ...	81	.....	...	...	81	For thatching, &c., 7 Forest guards' huts ...	53	.....	...	...	53
	Mokhada Range— 2 Hirda depôts ...	...	.....	...	...	...						
	(1) Suryámal ...	30	.....	...	...	30	For thatching, &c., 8 Forest guards' huts ...	26	.....	...	...	26
	(1) Kiniste											
West Thána.	Salsette Range— 1 Cattle-pound ...	25	.....	...	...	25	For thatching 3 Forest huts	8	.....	...	...	8
							For thatching 19 Forest posts	48	.....	...	...	48
	Bassein Range— 1 Forest guard's hut.	10	.....	...	...	10	For repairing Mándvi bungalow	15	.....	...	...	15
	Máhim Range— 1 Forest guard's hut.	10	.....	...	...	10	Weather shutters, &c., to Parol bungalow and outhouses	27	.....	...	...	27
	4 Cattle-pounds ...	185	.....	...	...	185	Preparing side walls, &c., of 6 forest posts	30	.....	...	...	30
	Dahánu Range— 1 Cattle-pound ...	20	.....	...	...	20	Erecting side walls of karvi to Mánikpur Depôt ...	8	.....	...	...	8
							For thatching 19 Forest guards' huts	47	.....	...	...	47
	Umbargaon Range— 1 Cattle-pound ...	25	.....	...	...	25	For thatching 20 Forest huts	52	.....	...	...	52
							For thatching 22 Forest huts	55	.....	...	...	55
							For thatching 35 huts ...	87	.....	...	...	87
	Wáda Range— 4 Cattle-pounds ...	104	.....	...	...	104	For preparing sites, erecting side walls, &c., for 11 Forest posts...	44	.....	...	...	44
Surat.	Dang Range— Meheskatri bungalow (partly constructed).	1,013	Opened out a new road from Devriawan to Kasarbari for timber transit	8	525		For white-washing and other repairs to side bamboo walls of Waghai and Pimpri bungalows ...	52	Road repairs from Wághai to Dhurabhari.	45	103	722
									Road repairs from Pimpri to Sarowar ...	15	51	
	Sarowar bungalow (partly constructed).	231	.....	...	...		For turning tiles of the above bungalows	11	Road repairs from Wághai to Maheskatri.	14	34	
							For turning tiles and repairs to side walls, &c., of Dhadaváda bungalow ...	45	Bridge and road repairs from Wághai to Pimpri.	9	72	
	Wooden curb well at Mahála	10	.....	...	...		For turning tiles and repairs to side walls, &c., of Mándvi and Táráipur bungalows ...	12	Repairs to road from Vareli to Gawachi to the river Tápti for the carriage of felled timber	4	5	
	Mándvi Range	...	.....	...	...	1,934	Repairs to Mándvi post ...	3				
							Do. to Pipalwáda post.	1	Repairs to road from Bhatkhai to river fords.	4	12	
	Bulsár Range— 1 Well at Teethal ...	100	.....	...	...		Do. to Vejalpur bungalow	15	.....	...	...	
							Turning tiles of Range Forest Officer's bungalow and erection of Wagrech depôt shed	15	.....	...	...	
	Chikhli Range— 1 Post at Dalwada ...	52	.....	...	...		Repairs to Dalwáda post ...	1	.....	...	...	
Panch Mahals.	Halol Range— 2 Forest posts at Champáner ...	20	.....	...	...	20	Godhra Range— For turning tiles and white-washing &c., of the Divisional Forest Officer's bungalow at Godhra ...	42	.....	...	...	93
							For thatching and repairing 8 Forest posts	51	.....	...	...	
	Grand Total ...	2,421	.....	11	536	2,957	.....	1,261	.....	91	367	1,628

Camp Dahisar, Thána District, 14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle

FORM No. 52.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Prosecutions for Breaches of Forest-Rules during 1892-93.

Forest Division and Civil District.		Cases pending from 1891-92.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
East Thána...	A.	17	7	125	2	2	136	153	67	152	43	158	110	310	43
	B.	...	...	173	...	...	173	173	173	358	...	...	173	358	...
	C.	...	152	270	...	...	422	422	...	...	...	...	...	...	...
	Total ...	17	159	568	2	2	731	748	240	510	43	158	283	668	43
West Thána	A.	9	2	97	5	8	112	121	91	218	17	47	108	265	12
	B.	...	3	115	3	1	122	122	122	272	...	...	122	272	...
	C.	...	177	128	...	29	334	334	...	...	...	...	...	...	...
	Total ...	9	182	340	8	38	568	577	213	490	17	47	230	537	12
Surat ...	A.	...	...	2	...	1	3	3	3	4	...	...	3	4	...
	B.	...	...	13	2	2	17	17	17	17	...	...	17	17	...
	C.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	15	2	3	20	20	20	21	...	...	20	21	...
Panch Mahals	A.	2	...	11	1	...	12	14	11	33	2	8	13	41	1
	B.	...	1	100	4	2	107	107	107	132	...	...	107	132	...
	C.	...	...	26	...	...	26	26	...	...	...	...	...	...	...
	Total ...	2	1	137	5	2	145	147	118	165	2	8	120	173	1
							Abstract of the above totals.								
	A.	28	9	235	8	11	263	291	172	407	62	213	234	620	57
	B.	...	4	401	9	5	419	419	419	779	...	...	419	779	...
	C.	...	329	424	...	29	782	782	...	...	...	...	...	...	...
Grand Total ...		28	342	1,060	17	45	1,464	1,492	591	1,186	62	213	653	1,399	57

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 53.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Area of Forest Tracts protected from Fire during 1892-93.

Division.	Forest Tracts.	Year in which protection commenced.	Area protected during 1891-92.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	REMARKS.
1	2	3	4	5	6	7	8	9
			Acres.	Acres.	Acres.	Acres.	Rs.	
East Thána ...	Sháhápur	1878-79.	52,153	152,632	10,976	141,656	406	
	Khardi		45,428	49,423	592	48,831	99	
	Mokháda		22,886	35,473	522	34,951	235	
	Kalyán		89,319	90,288	1,114	89,174	211	
	Murbád		46,884	47,914	2,611	45,303	171	
	Bhiwndi							
	Total ...		256,670	375,730	15,815	359,915	1,122	
West Thána ...	Sálsette	1878-79.	15,328	15,629	492	15,137	139	
	Bassein		53,235	54,618	1,298	53,320	258	
	Máhim		124,083	127,345	1,991	125,354	1,180	
	Dáhánu		158,679	161,127	1,431	159,446	287	
	Umbargaon				250		159	
	Váda		76,226	76,226	2,700	73,526	407	
	Total ...		427,551	434,945	8,162	426,783	2,430	
Surat	Dángs	1878-79.	2,000	434,240	432,240	2,000	63	
	Mándvi		40,739	41,068	2,750	38,318	39	
	Bulsár		961	985	...	985	2	
	Párdi...		564	573	...	573	...	
	Chikhli		811	825	...	825	2	
	Bárdoli		450	450	...	450	...	
	Total ...		45,525	478,141	434,990	43,151	106	
Panch Mahals ...	Godhra	1878-79.	81,543	89,407	1,475	87,932	4	
	Kálol		20,828	22,262	1,236	21,026	7	
	Halol		26,602	28,496	750	27,746	...	
	Dohad		45,388	46,538	263	46,275	14	Forest area in Dohad and Jhalod táluks is not included in Form No. 46.
	Jhalod		26,717	26,872	220	26,652	...	
	Total ...		201,078	213,575	3,944	209,631	25	
	Grand Total ...		930,824	1,502,391	462,911	1,039,480	3,683	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 54.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Area closed and open to Grazing during 1892-93.

Division.	AREA IN SQUARE MILES.					Total Area.	REMARKS.
	CLOSED TO ALL ANIMALS.		CLOSED TO BROWSERS (CAMELS, GOATS OR SHEEP).		OPEN TO ALL ANIMALS.		
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
1	2	3	4	5	6	7	8
East Thána.							Area open to all animals except browsers is shown below.
Sháhápur	10	...	238	...	...	238	228
Khardi							
Mokháda	4	...	77	...	...	77	73
Murbád	5	...	141	...	...	141	136
Kalyán	7	...	55	...	...	55	48
Bhiwndi	5	...	75	...	...	75	70
Total ...	31	...	586	...	...	586	555
West Thána.							
Sálsette	9	...	24	...	...	24	15
Bassein	11	...	84	...	...	84	73
Máhim	18	...	199	...	...	199	181
Dáhánu	22	...	175	...	...	175	153
Umbargaon	4	...	77	...	...	77	73
Váda	9	...	119	...	...	119	110
Total ...	73	...	678	...	...	678	605
Surat.							
Dángs	...	...	...	...	678	678	
Mándvi	27	37	64	...	...	64	
Bulsár	½	1¾	2¼	...	...	2¼	
Chikhli	½	1½	2	...	...	2	
Total ...	28	40¼	68¼	...	678	746¼	
Panch Maháls.							
Godhra	49	91	140	...	...	140	
Kálol	11	23	34	...	...	34	
Hálol	16	28	44	...	...	44	
Dohad	24	49	73	...	...	73	
Jhálod	12	29	41	...	...	41	
Total ...	112	220	332	...	...	332	
Grand Total ...	244	260¼	1,664¼	...	678	2,342¼	1,160

Camp Dahisar, Thana District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 55.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Return of Grazing in the State Forests during 1892-93.

Division.	GRAZING ON PAYMENT—NUMBER OF ANIMALS.													GRAZING FREE—NUMBER OF ANIMALS.												Total value of Fees at full rates.	Grand total of value at full rates.
	AT FULL RATES.						AT PRIVILEGED RATES.							BY RIGHT UNDER SETTLEMENT.						DURING PLEASURE OF GOVERNMENT, OR OTHERWISE THAN UNDER SETTLEMENT.								
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of Fees at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of Fees at full rates.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
						Rs. a. p.						Rs. a. p.	Rs. a. p.						Rs. a. p.							Rs. a. p.	Rs. a. p.
East Thána ...	94	3,980	...	...	...	2,605 10 0	249	4,126	...	...	56	1,076 14 0	2,924 0 0	23,532	66,183	...	...	16,445	80,967 6 0	...	...	...	...	...	...	80,967 6 0	86,497 0 0
West Thána ...	19	1,885	...	...	...	1,201 14 0	314	923	...	...	...	275 6 0	969 6 0	20,767	90,135	10,573	...	...	83,296 0 0	...	...	...	...	...	...	83,296 0 0	85,467 4 0
Surat	528	2,598	...	...	...	848 0 0	...	9	...	...	...	...	5 0 0	95	1,352	...	...	...	441 8 0	...	...	...	...	...	...	441 8 0	1,294 8 0
Panch Mahals ...	2,947	12,787	...	...	...	4,306 9 6	...	...	...	...	...	...	...	...	47,000	...	...	...	13,200 0 0	...	...	...	...	...	...	13,200 0 0	17,506 9 6
Total ...	3,588	21,250	...	...	...	8,962 1 6	563	5,058	...	...	56	1,352 4 0	3,898 6 0	44,394	204,670	10,573	...	16,445	1,77,904 14 0	...	...	...	...	...	...	1,77,904 14 0	1,90,765 5 6

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 56.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Area of Plantations, 1892-93.

Division.	Name of Plantation.	Area in Acres.				Receipts	Charges	Remarks.
		On 1st April 1892.	Add during the year.	Excluded during the year.	Area on 30th June 1893.	Of the year.		
1	2	3	4	5	6	7	8	9
	Regular Plantations.							
East Thána ...	Bhiwandi	185	39	...	224	...	116	
	Mokháda	62	23	...	85	...	...	
	Sháhápur	84	36	...	120	...	249	
	Khardi	24	20	...	44	...	...	
	Kalyán	73	15	...	88	...	30	
	Múrbád	16	15	...	31	...	28	
	Total ...	444	148	...	592	...	423	
West Thána ...	Salsette	117	13	...	130	...	42	
	Bassein	2	...	..	2	...	...	
	Máhim	1,880	...	...	1,880	...	...	
	Dáhánu	4	...	...	4	...	26	
	Umbargaon	130	...	...	130	...	55	
	Wáda	92	...	...	92	...	20	
	Total ..	2,225	13	...	2,238	...	143	
Surat	.....	...	...	...	...	...	...	
Panch Maháls ...	Kálol...	222	277	...	499	98	241	
	Halol...	14	...	...	14	...	...	
	Total ...	236	277	...	513	98	241	
	Total Regular Plantations .	2,905	438	...	3,343	98	807	
	Cultural Operations.							
East Thána ...	Bhiwandi	773	71	...	844	...	...	
	Sháhápur	770	170	...	940	...	...	
	Khardi	435	99	...	534	...	...	
	Mokháda	354	329	...	683	...	...	
	Kalyán	1,313	42	...	1,355	...	...	
	Múrbád	761	12	...	773	...	...	
	Total ...	4,406	723	...	5,129	...	...	
West Thána ...	Sálsette	688	101	...	789	...	56	
	Bassein	4,271	1,132	...	5,403	...	54	
	Máhim	6,464	90	...	6,554	...	130	
	Dáhánu	6,435	72	...	6,507	...	85	
	Umbargaon	2,294	17	...	2,311	...	97	
	Wáda	2,912	36	...	2,948	...	52	
	Total ...	23,064	1,448	...	24,512	...	474	
Surat	Dángs	...	7	...	7	...	...	
	Mándvi	788	18	...	806	...	70	
	Bulsár	186	48	...	234	...	362	
	Chikhli	203	29	...	232	...	15	
	Párdi...	94	7	...	101	...	19	
	Total ...	1,271	109	...	1,380	...	466	
Panch Maháls ...	Godhra	328	61	...	389	...	...	
	Kálol...	58	16	...	74	...	...	
	Hálol...	87	22	...	109	...	...	
	Dohad	87	22	...	109	...	...	
	Jhálod	49	12	...	61	...	...	
	Total ...	609	133	...	742	...	...	
	Total Cultural Operations .	29,350	2,413	...	31,763	...	940	
	Add—Total Regular Plantations	2,905	438	...	3,343	98	807	
	Grand Total ...	32,255	2,851	...	35,106	98	1,747	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

B 827—13 NC

FORM No. 57.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Outturn (in Cubic Feet, solid) of Timber and Fuel during the year 1892-93 and Agency of Exploitation.

Division.	TIMBER IN THE ROUGH; LOGS.					TIMBER IN THE ROUGH; POLES.					SAWN OR SQUARED TIMBER.					MISCELLANEOUS.					FUEL.					Total Outturn.
	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	C. ft.	C. ft	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
East Thána ...	...	188,960	...	...	188,960	32,550	458,825	1,761	...	493,136	...	...	...	...	...	...	Timber 163,707 Bamboos No. 288,673 Cart-loads ...1,086 Head-loads ...6,386	...	...	Timber 163,707 Bamboos No. 288,673 Cart-loads ...1,086 Head ,, ...6,386	20,376	722,874	...	...	743,250	Timber & firewood 1,589,053 Bamboos No. 288,673 Cart-loads ...1,086 Head ,, ...6,386
West Thána ...	...	...	...	...	...	1,345	1,835,775	270	...	1,837,290	...	...	...	...	...	...	Bamboos No. 2,027,223 Cart-loads ...8,655 Head-loads ...5,525	...	...	Bamboos No. 2,027,223 Cart-loads ...8,655 Head ,, ...5,525	4,714	2,954,850	...	...	2,959,564	Timber & firewood 4,796,854 Bamboos No. 2,027,223 Cart-loads ...8,655 Head ,, ...5,525
Surat	77,635	59,442	1,300	...	138,427	...	9,248	...	...	9,248	...	...	...	...	...	Bamboos. No. 2,381	Bamboos No. 1,094,232 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564	...	...	Bamboos No. 1,096,613 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564	...	30,793	...	...	30,793	Timber & firewood 178,468 Bamboos No. 1,096,613 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564
Panch Mahâls ...	428	70,969	1,080	...	72,477	935	136,074	1,080	...	138,089	...	16.	...	...	16	Timber. 2,707	Timber 1,025 Bamboos No. 217,272 Cart-loads ...193	...	...	Timber 3,732 Bamboos No. 217,272 Cart-loads ...193	10,700	242,281	...	...	252,981	Timber & firewood 467,295 Bamboos No. 217,272 Cart-loads ...193
Total ...	78,113	319,371	2,380	...	399,864	34,730	2,439,922	3,111	...	2,477,763	...	16	...	...	16	Timber 2,707 Bamboos No. 2,381	Timber 164,732 Bamboos No. 3,627,400 Cart-loads ... 9,934 Head ,, ...11,911 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564	...	...	Timber 167,439 Bamboos No. 3,629,781 Cart-loads ... 9,934 Head ,, ...11,911 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564	35,790	3,950,798	...	...	3,986,588	Timber & firewood 7,031,670 Bamboos No. 3,629,781 Cart-loads ... 9,934 Head ,, ...11,911 Gánjas ... 2,859 Paranas ...37,500 Pipes ... 1,564

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 58.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Outturn of Minor Forest Produce.

Division.	Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
		Bombay Government Agency.		By Purchasers.		By Free Grants.		By Right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11	12
			Rs.		Rs.		Rs.		Rs.		Rs.
East Thána.	Myrobolams .. .. Khandis.	30 13 12	644	....	..	..	..	..	..	30 13 12	644
	Karvi .. .. .. Cart-loads	....	....	1,996	467	..	..	..	..	1,996	467
	Do. .. .. .. Head-loads.	....	....	1,751	49	..	..	..	..	1,751	49
	Mango fruits	....	....	1,000	5	..	..	..	..	1,000	5
	Thorns .. .. .. Cart-loads.	....	....	144	100	..	..	..	..	144	100
	Stones .. .. .. Do.	....	....	15	2	..	..	..	..	15	2
	Dead palm trees	....	....	7	5	..	..	..	..	7	5
	Miscellaneous	....	....	....	27	..	..	..	..	....	27
	Total ..	30 13 12	644	....	655	..	..	..	..	.....	1,299
West Thána.	Myrobolams .. .. Khandis.	9 11 0	263	....	..	..	..	..	..	9 11 0	263
	Karvi .. .. .. Cart-loads.	....	....	....	640	..	..	..	..	....	640
	Stones and limestones	....	....	....	8	..	..	..	..	....	8
	Brab-tree leaves	....	....	....	1,435	..	..	..	..	....	1,435
	Grass for ash manure	....	....	....	194	..	..	..	..	....	194
	Miscellaneous	....	....	.....	198	..	..	..	..	....	198
	Total ..	9 11 0	263	....	2,475	..	..	..	..	9 11 0	2,738
Surat.	Timru leaves .. .. Cart-loads.	....	....	6	15	..	..	..	..	6	15
	Ashindra leaves .. Bundles.	....	....	25,71,975	362	..	..	..	..	25,71,975	362
	Honey .. .. .. Seers.	....	....	1,728	18	..	..	..	..	1,728	18
	Wax .. .. .. Do.	....	....	83	1	..	..	..	..	83	1
	Mowra flowers and Seeds .. .. .. Maunds.	....	....	1,728	254	..	..	..	..	1,728	254
	Karanj seeds .. .. Do.	....	....	174	11	..	..	..	..	174	11
	Reeds and Chhaj grass	....	....	1,170	304	..	..	..	..	1,170	304
	Date palm-trees	....	....	235	70	..	..	..	..	235	70
	Rosha oil stills	....	....	10	178	..	..	..	..	10	178
	Different kinds of bamboo articles.	....	....	15,926	536	..	..	..	..	15,926	536
	Miscellaneous	....	....	....	354	..	..	..	..	....	354
	Total ..	....	....	....	2,103	..	..	..	..	....	2,103
Panch Mahals.	Mowra flowers	....	....	....	2,887	..	..	..	..	....	2,887
	Thorns .. .. .. Cart-loads.	....	....	86	26	..	..	..	..	86	26
	Sand .. .. .. Do.	....	....	20	11	..	..	..	..	20	11
	Earth .. .. .. C. yards.	....	....	72	5	..	..	..	..	72	5
	Sali bark .. .. Head-loads.	....	....	71	25	..	..	..	..	71	25
	Miscellaneous	....	....	....	17	..	..	..	..	....	17
	Total ..	....	....	....	2,371	..	..	..	..	....	2,371
	Grand Total ..	39 24 12	907	....	7,604	..	..	..	..	9 11 0	8,511

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 59.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1892-93.

Particulars.	Number or Quantity.	Cubic feet.	Total of each Head. Number or Quantity.	Total of each Head. Cubic feet.	Particulars.	Number or Quantity.	Cubic feet.	Total of each Head. Number or Quantity.	Total of each Head. Cubic feet.
			TIMBER.						
Balance at the commencement of the year.					*Sold locally.*				
East Thána ... Timber pieces (mixed) ...	2,009	6,027	2,009	6,027	Teak pieces, including beams, logs, &c.	16,902	91,898		
West Thána ... Teak pieces, Jungle wood pieces ...	1,172 273	3,516 819	... 1,445	 4,335	Teak rafters and poles	30,179	44,720		
					Mixed teak pieces	12,859	38,577		
					Junglewood pieces and rafters ...	1,093	1,666		
Surat ... ... Teak logs and rafters... Do. pieces ... Do. beams ... Jungle wood pieces ...	5,503 2,674 1,778 330	9,296 39,516 6,223 990	 10,285	 56,025	Timber piece, of haladwan ...	1	15		
					Timber pieces of khair	78	146		
					Balance at the close of the year.			61,112	1,77,022
Panch Mahâls ... Teak logs and rafters... Do. pieces ...	27 12	880 76	... 39	 956	*West Thána.*				
					Teak pieces	310	930		
					Junglewood pieces	138	414		
Total, Balance ...	...	.....	13,778	67,343				448	1,344
					Surat.				
					Teak pieces	513	643		
					Junglewood pieces and rafters ...	182	546		
					Timber pieces of kilai	11	278		
					,, bondâro	11	292		
					,, sâdado	46	737		
					,, kânti	16	322		
					,, beo	15	298		
					,, khair	3	34		
					,, sissum	1	17		
					,, haladwan ...	20	540		
Received from Forests in Depôt.								818	3,707
					Panch Mahâls.				
Teak pieces including beams, logs, &c.	12,571	44,380							
Teak rafters and poles	26,079	34,964			Teak pieces	482	240		
Mixed teak pieces...	10,850	32,550			Do. rafters	1,430	420		
Junglewood pieces and rafters..e	946	977			Junglewood pieces	136	160	2,048	820
Timber pieces of kilai	11	278							
Do. haladwân ...	21	555							
Do. bondâro ...	11	292							
Do. sâdado ...	46	737							
Do. kânti	16	322							
Do. beo	15	298							
Do. khair	81	180							
Do. sissum	1	17							
			50,648	1,15,550	Total Balance ...	...	.....	3,314	5,871
Total Timber ...	...	.....	64,426	1,82,893	Total Timber ...	...	.....	64,426	1,82,893
			FIREWOOD.						
Balance in hand at the commencement of the year.						Kh.		Kh.	
East Thána	2	25	2	25	Sold locally during the year ...	5,864	76,650	5,864	76,650
West Thána	3,667	45,837	3,667	45,837	Firewood pieces	105	452	105	452
Total Balance ...	...	.....	3,669	45,862	Balance at the close of the year ...	180	2,250		
					West Thána.				
Received during the year.	Kh.		Kh.		Panch Mahâls	92	2,300	272	4,550
East Thána	1,638	20,376	1,698	20,376					
West Thána	341	4,263	341	4,263					
Firewood pieces, &c. ...	105	452	105	452					
Panch Mahâls	428	10,700	428	10,700					
Total Firewood, Khandis ...	...	.....	6,136	80,200	Total Firewood, Khandis ...	...	.....	6,136	81,200
Do. Pieces ...	...	.....	105	452	Do. Pieces ...	...	.....	105	452
			BAMBOOS.						
Balance at commencement of the year.						No.		No.	
Received during the year.	No.		No.		Sold locally	2,400	.....	2,400	.....
Surat	3,000	.....	3,000	.....	Balance at close of the year ...	...	.....	600	.....
Total, Bamboos ...	...	.....	3,000	.....	Total Bamboos ...	...	.....	3,000	.....
			HIRDA'S.						
Balance at commencement of the year.	Kh. m. s.		Kh. m. s.			Kh. m. s.		Kh. m. s.	
East Thána	8 7 6	.....	8 7 6	.....	Sold during the year	39 24 12	.....	39 24 12	.....
Received during the year.					Balance at close of the year ...	...	.....	.....	.....
East Thána	22 6 6	.....	.....	.....					
West Thana	9 11 0	.....	31 17 6	.....					
Total Hirdas ...	...	.....	39 24 12	.....	Total Hirdas ...	...	.....	39 24 12	.....
			SEEDS.						
Balance at commencement of the year.									
East Thána...	5 17 26	.....	.....	.....	Used up during the year	109 12 1	.....	109 12 1	.....
Panch Mahâls	12 24 2	.....	18 14 0	.....	Balance at close of the year ...	...	.....	.....	.....
Received during the year.					East Thgna	44 24 22	.....	.....	.....
East Thána	129 17 20	.....	.....	.....	Panch Mahâls	7 3 5	.....	51 27 27	.....
Panch Mahâls	13 8 8	.....	142 26 0	.....					
Total Seeds ...	...	.....	161 12 0	.....	Total Seeds ...	...	.....	161 12 0	.....

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 60.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1892-93.

Description of Timber and other Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
East Thána Division.									
Timber pieces... ...	2,009	6,027	265	...	...	...	...	...	
Firewood... Khandis	2	25	2	...	...	...	...	...	
	Kh. m. lbs.			Kh. m. lbs.					
Hirda nuts	8 7 6	...	167	...	...	...	...	...	
Miscellaneous seeds ...	5 17 26	...	...	44 24 22	...	...	...	...	
Total ...	...	...	434	...	...	...	...	434	
West Thána Division.									
Teak pieces	1,172	3,516	120	310	930	50	...	...	
Junglewood pieces ...	273	819		138	414	20	...	...	
Firewood... Khandis	3,667	45,837	1,800	180	2,250	80	...	...	
Total ...	...	...	1,920	...	...	150	...	1,770	
Surat Division.									
Teak pieces and rafters	8,177	48,812	40,001	513	643	125	...	...	
Teak beams	1,778	6,223	4,100	123	2,518	475	...	...	
Junglewood pieces ...	330	990	100	182	546	50	...	...	
Total ...	...	...	44,201	...	...	650	...	43,551	
Panch Mahâls Division.									
Teak pieces	39	956	5	482	240	100	...	...	
Teak rafters	...	...	...	1,430	420				
Junglewood pieces ...	...	...	...	136	90				
Firewood ... Khandis	...	...	...	92	2,300	87	...	...	
	Kh. m. lbs.			Kh. m. lbs.					
Miscellaneous seeds ...	12 24 2	...	...	7 3 5	...	...	...	...	
Total ...	...	...	5	...	...	187	182	...	
Grand Total ...	...	...	46,560	...	...	987	182	45,755	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

B 827—14 NC

FORM No. 60A.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Abstract showing the Value of Live and Dead Stock for the year 1892-93.

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		Remarks.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Direction.							
Office tent	...	...	1	420	...	...	
Tools, plant and office furniture ...	...	...	...	280	...	...	
... Total ...	...	...	...	700	700	...	
East Thána Division.							
Office tent	1	433	1	433	...	...	
Small rautis	2	186	2	186	...	...	
Great coats	201	1,309	201	1,309	...	...	
Tools, plant and office furniture ...	...	856	...	930	...	...	
Tánsa Forest bungalow ...	...	...	1	1,871	...	...	
Total ...	...	2,784	...	4,729	1,945	...	
West Thána Division.							
Párol bungalow	1	1,200	1	1,200	...	...	
Forest depôt house at Mándvi ...	1	250	1	250	...	...	
Do. at Mánikpur...	1	603	1	603	...	...	
Forest stations	38	570	38	570	...	...	
Do. posts	82	840	82	840	...	...	
Do. depôt house at Pálghar ...	...	...	1	1,083	...	...	
Do. at Manor ...	...	...	1	1,083	...	...	
Do. at Sawta ...	...	...	1	1,083	...	...	
Do. at Sanján ...	...	...	1	1,083	...	...	
Office tent	*1	273	...	...	...	...	
Do.	1	433	1	433	...	...	
Small rautis	2	188	2	188	...	...	*Sold during the year.
Great coats	226	1,359	226	1,359	...	...	
Tools, plant and office furniture ...	...	2,446	...	2,463	...	...	
Total ...	...	8,162	...	12,238	4,076	...	
Surat Division.							
Office tent	1	246	1	246	...	...	
Do.	1	433	1	433	...	...	
Andhátri bungalow	1	291	1	291	...	...	
Dhadawádá bungalow ...	1	80	1	80	...	...	
Tárápur do. ...	1	100	1	100	...	...	
Large bungalow at Waghai ...	1	} 1,099	1	} 1,099	...	...	
Small do. do. ...	1		1		...	...	
Carried over ...	...	2,249	...	2,249	...	...	

FORM No. 60A—*continued.*

Description of Live and Dead Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		Remarks.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Brought forward ...	7	2,249	7	2,249			
Surat Division—continued.							
Large bungalow at Pimpri ...	1	499	1	499	...	...	
Do. at Garvi ...	1	1,012	1	1,012	...	...	
Small do. do. ...	1	288	1	288	...	...	
Great coats	65	455	65	455	...	...	
Tools, plant and office furniture ...	...	1,837	...	1,837	...	...	
Total ...	...	6,340	...	6,340	...	...	
Panch Mahâls Division.							
Rest-houses and depôts ...	45	2,525	45	2,525	...	...	
Bungalow at Godhra	1	8,200	1	8,200	...	...	
Office tent	1	433	1	433	...	...	
Great coats	110	717	110	717	...	...	
Tools, plant and office furniture ...	...	1,324	...	1,324	...	...	
Total ...	...	13,199	...	13,199	...	...	
Working Plans.							
Office tent	1	285	1	285	...	...	
Tools, plant and office furniture ...	...	1,103	...	922	...	...	
Total ...	...	1,388	...	1,207	...	181	

Camp Dahisar, Thâna District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

FORM No. 61.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Summary of Revenue and Expenditure of the different Divisions during Forest year 1892-93 (from April 1892 to end of June 1893).

Budget Heads.	Direction.	East Thána.	West Thána.	Surat.	Panch Mahâls.	Working Plans.	Bombay Forest Survey.	Total for the Forest year 1892-93.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other Produce removed from the Forests by Government Agency—								
a. Timber	.....	3,118 3 0	820 10 6	60,858 14 0	1,094 10 0	.....	.....	65,892 5 6
b. Firewood and Charcoal	.....	4 6 6	1,787 15 0	.....	726 12 0	.....	.....	2,519 1 6
c. Bamboos	.....	.....	.....	164 9 10	.....	.....	.....	164 9 10
d. Sandalwood	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other Minor Produce	.....	643 10 10	263 0 0	.....	.....	.....	.....	906 10 10
Total I	.....	3,766 4 4	2,871 9 6	61,023 7 10	1,821 6 0	.....	.....	69,482 11 8
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—								
a. Timber	.....	98,829 1 6	2,66,828 3 3	55,176 0 9	71,272 11 1	.....	.....	4,92,106 0 7
b. Firewood and Charcoal	.....	2,406 2 0	9,226 0 4	751 9 0	4,421 0 0	.....	.....	16,804 11 4
c. Bamboos	.....	9,003 13 0	12,705 6 5	25,364 1 11	2,899 0 6	.....	.....	49,972 5 10
d. Grazing and Fodder Grass	.....	3,847 6 0	15,147 15 0	1,303 6 0	5,853 6 6	.....	.....	26,152 1 6
e. Other Minor Produce	.....	655 1 3	2,475 2 6	2,103 6 0	2,370 15 3	.....	.....	7,604 9 0
Total II.	.....	1,14,741 7 9	3,06,382 11 6	84,698 7 8	86,817 1 4	.....	.....	5,92,639 12 3
III.—Confiscated Drift and Waif Wood	.....	1,220 2 0	739 11 6	294 5 2	92 15 10	.....	.....	2,347 2 6
Total III.	.....	1,220 2 0	739 11 6	294 5 2	92 15 10	.....	.....	2,347 2 6
IV.—Revenue from Forests not managed by Government—								
a. Duty on Foreign Timber and other Forest Produce	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from Shared and Private Forests	.....	762 1 1	639 8 4	170 0 9	.....	.....	.....	1,571 10 2
Total IV.	.....	762 1 1	639 8 4	170 0 9	.....	.....	.....	1,571 10 2
V.—Miscellaneous—								
a. Fines and Forfeitures	.....	3,670 0 8	1,688 1 9	250 0 0	215 4 1	.....	.....	5,823 6 6
b. Refunds	.....	554 7 6	190 5 10	72 3 0	1 8 0	.....	.....	818 8 4
c. Other sources	.....	2,853 11 10	5,091 9 11	1,008 7 10	1,202 4 8	.....	44 6 4	10,200 8 7
Total V.	.....	7,078 4 0	6,970 1 6	1,330 10 10	1,419 0 9	.....	44 6 4	16,842 7 5
Total Receipts	.....	1,27,568 3 2	3,17,603 10 4	1,47,517 0 3	90,150 7 11	.....	44 6 4	6,82,883 12 0

EXPENDITURE.

A.—Conservancy and Works.

I.—Timber and other Produce removed from the Forests by Government Agency.							
a. Timber	.....	890 12 8	178 15 6	6,550 4 6	123 9 0	.....	7,743 9 8
b. Firewood and Charcoal	.....	2 8 0	104 3 6	.....	.....	.....	106 11 6
c. Bamboos	.....	.....	.....	91 12 0	.....	.....	91 12 0
d. Sandalwood	.....	.....	.....	.....	.....	.....	.....
e. Grass and other Minor Produce	.....	163 11 3	91 7 0	.....	.....	.....	255 2 3
Total A, I	.....	1,056 15 11	374 10 0	6,642 0 6	123 9 0	.....	8,197 3 5
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers	.....	3,529 0 7	8,470 11 6	3,625 10 10	1,034 10 11	.....	16,660 1 10
Total A, II	.....	3,529 0 7	8,470 11 6	3,625 10 10	1,034 10 11	.....	16,660 1 10
III.—Confiscated Drift and Waif Wood	.....	16 9 9	40 2 6	5 2 9	1 1 0	.....	63 0 0
Total A, III	.....	16 9 9	40 2 6	5 2 9	1 1 0	.....	63 0 0
IV.—Revenue from Forests not managed by Government.							
a. Duty on Foreign Timber and other Forest Produce	.....	.....	.....	.....	.....	.....	.....
b. Revenue from Shared and Private Forests	.....	.....	.....	.....	.....	.....	.....
Total A, IV	.....	.....	.....	.....	.....	.....	.....
V.—Rent of Leased Forests and payments to Shareholders in Forests managed by Government	.....	746 10 7	.....	19,550 3 6	3,065 14 5	.....	23,362 12 6
Total A, V	.....	746 10 7	.....	19,550 3 6	3,065 14 5	.....	23,362 12 6
VI.—Live Stock, Stores, Tools and Plant.							
a. Purchase of Cattle	.....	.....	.....	.....	.....	.....	.....
b. Feed and Keep of Cattle	.....	53 12 0	.....	.....	.....	.....	53 12 0
c. Stores, Tools and Plant	713 7 0	204 15 6	82 8 6	310 11 6	2 6 0	22 0 0	1,336 0 6
Total A, VI	713 7 0	258 11 6	82 8 6	310 11 6	2 6 0	22 0 0	1,389 12 6
VII.—Communications and Buildings.							
a. Roads and Bridges	.....	11 2 0	.....	874 1 7	.....	.....	885 3 7
b. Buildings	.....	919 5 6	866 9 8	1,481 15 3	112 8 0	.....	3,380 6 5
c. Other Works	.....	276 5 6	.....	109 3 0	.....	.....	385 8 6
Total A, VII	.....	1,206 13 0	866 9 8	2,465 3 10	112 8 0	.....	4,651 2 6

FORM No. 61—*continued.*

Budget Heads.	Direction.	East Thána.	West Thána.	Surat.	Panch Mahâls.	Working Plans.	Bombay Forest Survey.	Total for the forest year 1892-93.
EXPENDITURE—*continued.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—*continued.*								
VIII.—Demarcation, Improvement and Extension of Forests.								
a. Demarcation	.....	1,721 12 3	6,707 8 11	8,912 15 1	559 4 4	.....	.....	17,901 8 7
b. Compensation for Land and Rights	.....	30,117 10 9	.....	.....	435 6 0	.....	.....	30,553 0 9
c. Forest Surveys	.....	4,113 0 0	7,272 12 1	383 14 7	617 0 0	.....	(*a*) 6,022 0 0	18,408 10 8
d. Working Plans	.....	.....	.....	.....	.....	8,857 1 1	.....	8,857 1 1
e. Sowing and Planting	.....	459 9 0	778 13 3	1,502 12 3	394 11 8	.....	.....	3,135 14 2
f. Protection from fire	.....	1,168 9 3	2,425 10 6	185 8 6	0 8 0	.....	.....	3,780 4 3
g. Other works	.....	350 4 0	1,327 7 10	47 7 9	.....	.....	.....	1,725 3 7
Total A, VIII ...	.....	37,930 13 3	18,512 4 7	11,032 10 2	2,006 14 0	8,857 1 1	6,022 0 0	84,361 11 1
IX.—Miscellaneous.								
a. Refunds	.....	.....	.....	.....	.....	.....	.....	.....
b. Law Charges	.....	6 0 0	1,229 8 0	.....	.....	.....	.....	1,235 8 0
c. Other Charges	0 14 3	—338 15 9	—581 10 9	—3 8 7	—358 8 6	.....	.....	—1,281 13 4
Total A, IX ...	0 14 3	—332 15 9	647 13 3	—3 8 7	—358 8 6	.....	.....	—46 5 4
TOTAL A.—CONSERVANCY AND WORKS ...	714 5 3	44,412 10 10	28,994 12 0	43,628 2 6	5,988 6 10	8,879 1 1	6,022 0 0	1,38,639 6 6

B. "ESTABLISHMENTS."

I.—Salaries.								
a. Conservators	.....	13,590 9 0	15,452 0 4	9,365 2 7	6,064 8 3	13,570 0 0	.....	.....
b. Superior Officers	7,200 0 0	27,903 10 5	30,916 3 8	11,011 12 11	14,589 12 8	.....	.....	65,242 4 2
c. Subordinate Forest and Depôt Establishments	.....	.....	.....	.....	.....	.....	.....	84,421 7 8
d. Office Establishments	1,553 6 10	3,791 8 0	3,865 14 7	2,376 15 8	2,350 7 7	1,314 10 3	.....	15,252 14 11
e. Deputation and Special Allowances	.....	.....	.....	9 0 0	.....	.....	.....	9 0 0
Total, B. I.	8,753 6 10	45,285 11 5	50,234 2 7	22,762 15 2	23,004 12 6	14,884 10 3	.....	1,64,925 10 9
II.—Travelling Allowances.								
a. Conservators	.....	.....	.....	.....	.....	.....	.....	.....
b. Superior Officers	1,201 4 0	3,217 11 0	3,831 0 0	2,271 4 6	1,662 8 9	2,250 0 0	.....	14,433 12 3
c. Subordinate Forest and Depôt Establishments	.....	1,189 15 4	1,212 2 5	1,175 4 2	796 10 11	.....	.....	4,374 0 10
d. Office Establishments	1,012 10 9	1,193 6 0	1,206 15 11	850 8 11	728 4 0	465 5 9	.....	5,457 3 4
Total, B. II	2,213 14 9	5,601 0 4	6,250 2 4	4,297 1 7	3,187 7 8	2,715 5 9	.....	24,265 0 5
III.—Contingencies.								
a. Stationery	27 2 6	466 12 10	499 13 7	260 6 10	251 1 2	.....	.....	1,505 4 11
b. Carriage of Tents and Records	284 3 0	434 12 0	398 13 6	231 13 6	152 15 0	.....	.....	1,502 9 0
c. Rents, Rates and Taxes	65 1 6	225 13 11	207 11 4	100 0 0	.....	.....	.....	598 10 9
d. Pay of Police Guards	.....	.....	.....	.....	.....	.....	.....	.....
e. Official Postage	80 5 6	1,023 4 0	809 15 0	484 1 0	329 2 0	.....	.....	2,726 11 6
f. Sundries	88 4 3	293 10 3	287 10 5	132 12 8	159 8 3	.....	.....	961 13 10
Payments to Officers of other Provinces	.....	.....	.....	.....	.....	.....	.....	.....
Total, B. III.	545 0 9	2,444 5 0	2,203 15 10	1,209 2 0	892 10 5	.....	.....	7,295 2 0
TOTAL B.—ESTABLISHMENTS	11,512 6 4	53,331 0 9	58,688 4 9	28,269 2 9	27,084 14 7	17,600 0 0	.....	1,96,485 13 2
GRAND TOTAL OF EXPENDITURE	12,226 11 7	97,743 11 7	87,683 0 9	71,897 5 3	33,073 5 5	26,479 1 1	6,022 0 0	3,35,125 3 8

(a) Amount of expenditnre on account of Forest Surveys made by the Superintendent, Bombay Forest Surveys, in April, May and June 1893, in the two Divisions of Thâna { West Thâna Rs. 4,257-1-4 / East do. Rs. 1,764-14-8 } added as per his No. 193, dated 4th August 1893 (*vide* copy sent with No. $\frac{F.}{13890}$ dated 14th August 1893).

Office of the Accountant General,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 62.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Annual Account Current for the Forest year 1892-93, extending from 1st April 1892 to the end of 30th June 1893.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance ...	.....	2,900 0 3	I.—Refunds and Drawbacks—Refunds—		
„ VIII.—Assessed Taxes—Income Tax—			Divided Heads, Forest ...	.....	1,888 13 11
Deductions by Government from Salaries and Pensions...	.....	2,774 0 1	II.—Forest (as per Summary) ...	.....	3,48,728 1 9
„ IX.—Forest (as per Summary) ...	.....	6,82,883 12 0	19.—Law and Justice—		
„ XII.—Interest—			Jails, District Jails, Contingencies ...	.....	.....
Interest on Arrears of Revenue ...	.....	.....	Revenue Deposits (Forests) ...	.....	46,398 7 11
„ XXIII.—Stationery and Printing—			Cheques and Bills (Forests Cheques cancelled) ...	.....	4,108 12 9
Stationery Receipts—			Advances Recoverable—		
Sale-proceeds of Stationery Boxes ...	.....	.....	Forest Advances ...	2,15,120 1 10	
Other Press Receipts—			Tentage Advances ...	.....	
Government Central Press... ...	.....	.....	Objection Book Advances ...	738 0 0	
„ Revenue Deposits (Forests) ...	.....	43,793 8 10			2,15,858 1 10
„ Cheques and Bills (Departmental cheques) Forests ...	.....	4,50,758 15 3	Cash Recoveries ...	.....	5,581 15 5
„ Advance Recoverable—			Forest Remittances—		
Forest Advances ...	2,12,325 10 9		Remittances to Treasuries ...	7,19,748 9 10	
Tentage Advances ...	211 1 3		Inter-divisional Transfers ...	71,346 11 6	
Objection Book Advances ...	794 10 8		Inter-departmental Transfers ...	147 3 3	
		2,13,331 6 8			7,91,242 8 7
„ Cash Recoveries ...	.....	5,581 15 5	Account Current—		
„ Forest Remittances—			Account between India and Bombay—		
Remittances to Treasuries ...	105 3 2		III.—Items Adjustable by India, Bengal Military Orphan Fund...	.....	24 8 0
Inter-divisional Transfers ...	14,216 3 10		Account between Bombay and Public Works Department, Bombay, (Ordinary Branches)—		
Inter-departmental Transfers ...	1,213 8 7		IV.—Items adjustable by Public Works Department... ...	.....	2,616 3 6
		15,534 15 7	Account between Bombay and Public Works Department (Railway Branch)... ...	.....	.....
„ Bombay Uncovenanted Service Family Pension Fund, Widow's Branch ...	.....	296 13 2	Railway—		
„ Account between India and Bombay—			IV.—Items Adjustable by Public Works Department ...	.....	.....
III.—Items Adjustable by India—					
Bengal Military Fund ...	.....	675 0 0			
„ „ Orphan Fund ...	.....	332 0 0			
„ Uncovenanted Service Family Pension Fund ...	.....	.....			
„ Account between Bombay and Public Works Department, Bombay—					
IV.—Payments into Treasuries by Civil Officers on account of Public Works Department	.....	22 5 4	Closing Balance ...	.....	2,437 2 11
Total ...	.....	14,18,884 12 7	Total ...	.....	14,18,884 12 7

No. 16178.

Forwarded to the Deputy Conservator of Forests, Northern Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 63.

FORM No. 63.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Revenue received and Outstandings on account of Revenue during 1892-93.

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	REMARKS.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
East Thána ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	(*a*). Timber	.....	3,118 3 0	3,118 3 0	3,118 3 0	.....	
	(*b*). Firewood and charcoal... ...	.....	4 6 6	4 6 6	4 6 6	.....	
	(*c*). Grass and other minor produce ...	.....	643 10 10	643 10 10	643 10 10	.....	
	II.—Timber and other produce removed from the Forests by Consumers and Purchasers—						
	(*a*). Timber	3,488 10 0	96,386 11 6	99,875 5 6	98,829 1 6	1,046 4 0	
	(*b*). Firewood and charcoal... ...	.....	2,406 2 0	2,406 2 0	2,406 2 0	.....	
	(*c*). Bamboos	.....	9,003 13 0	9,003 13 0	9,003 13 0	.....	
	(*d*). Grazing and fodder grass ...	.....	3,847 6 0	3,847 6 0	3,847 6 0	.....	
	(*e*). Other minor produce	.....	655 1 3	655 1 3	655 1 3	.....	
	III.—Drift and Waif Wood and confiscated Forest produce	.....	1,220 2 0	1,220 2 0	1,220 2 0	.....	
	Total ...	3,488 10 0	1,17,285 8 1	1,20,774 2 1	1,19,727 14 1	1,046 4 0	
West Thána ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	(*a*). Timber	.....	820 10 6	820 10 6	820 10 6	.....	
	(*b*). Firewood and charcoal... ...	.....	1,787 15 0	1,787 15 0	1,787 15 0	.....	
	(*c*). Grass and other minor produce ...	.....	263 0 0	263 0 0	263 0 0	.....	
	II.—Timber and other produce removed from the Forests by Consumers or Purchasers—						
	(*a*). Timber	2,348 4 0	2,64,479 15 3	2,66,828 3 3	2,66,828 3 3	.....	
	(*b*). Firewood and charcoal...	.....	9,226 0 4	9,226 0 4	9,226 0 4	.....	
	(*c*). Bamboos	.....	12,705 6 5	12,705 6 5	12,705 6 5	.....	
	(*d*). Grazing and fodder grass ...	.....	15,147 15 0	15,147 15 0	15,147 15 0	.....	
	(*e*). Other minor produce	.....	2,475 2 6	2,475 2 6	2,475 2 6	.....	

	III.—Drift and Waif Wood and confiscated Forest produce	.....	739 11 6	739 11 6	739 11 6	.....
	Total ...	2,348 4 0	3,07,645 12 6	3,09,994 0 6	3,09,994 0 6	.....
Surat	*I.—Timber and other produce removed from the Forests by Government Agency—*					
	(*a*). Timber	.....	60,858 14 0	60,858 14 0	60,858 14 0	.....
	(*c*). Bamboos	.....	164 9 10	164 9 10	164 9 10	.....
	II.—Timber and other produce removed from the Forests by Consumers or Purchasers—					
	(*a*). Timber	5,300 0 0	49,876 0 9	55,176 0 9	55,176 0 9	.....
	(*b*). Firewood and charcoal... ...	.....	751 9 0	751 9 0	751 9 0	.....
	(*c*). Bamboos	.....	25,364 1 11	25,364 1 11	25,364 1 11	.....
	(*d*). Grazing and fodder grass ...	.....	1,303 6 0	1,303 6 0	1,303 6 0	.....
	(*e*). Other minor produce	.....	2,103 6 0	2,103 6 0	2,103 6 0	.....
	III.—Drift and Waif Wood and confiscated Forest produce	.....	294 5 2	294 5 2	294 5 2	.....
	Total ...	5,300 0 0	1,40,716 4 8	1,46,016 4 8	1,46,016 4 8	.....
Panch Mahâls...	*I.—Timber and other produce removed from the Forests by Government Agency—*					
	(*a*). Timber	.....	1,094 10 0	1,094 10 0	1,094 10 0	.....
	(*b*). Firewood and charcoal	.....	726 12 0	726 12 0	726 12 0	.....
	II.—Timber and other produce removed from the Forests by Consumers or Purchasers—					
	(*a*). Timber	.....	71,272 11 1	71,272 11 1	71,272 11 1	.....
	(*b*). Firewood and charcoal... ...	.....	4,421 0 0	4,421 0 0	4,421 0 0	.....
	(*c*). Bamboos	.....	2,899 0 6	2,899 0 6	2,899 0 6	.....
	(*d*). Grazing and fodder grass ...	.....	5,853 6 6	5,853 6 6	5,853 6 6	.....
	(*e*). Other minor produce	.....	2,370 15 3	2,370 15 3	2,370 15 3	.....
	III.—Drift and Waif Wood and confiscated Forest produce	.....	92 15 10	92 15 10	92 15 10	.....
	Total ...	.....	88,731 7 2	88,731 7 2	88,731 7 2	.....

FORM No. 63—*continued.*

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Northern Circle.	*I.—Timber and other produce removed from the Forests by Government Agency—*						
	(*a*). Timber	.....	65,892 5 6	65,892 5 6	65,892 5 6	.....	
	(*b*). Firewood and charcoal... ...	.....	2,519 1 6	2,519 1 6	2,519 1 6	.....	
	(*c*). Bamboos	.....	164 9 10	164 9 10	164 9 10	.....	
	(*d*). Grass and other minor produce ...	.....	906 10 10	906 10 10	906 10 10	.....	
	II.—Timber and other produce removed from the Forests by Consumers and Purchasers—						
	(*a*). Timber	11,136 14 0	4,82,015 6 7	4,93,152 4 7	4,92,106 0 7	1,046 4 0	
	(*b*). Firewood and charcoal... ...	.....	16,804 11 4	16,804 11 4	16,804 11 4	.....	
	(*c*). Bamboos	.....	49,972 5 10	49,972 5 10	49,972 5 10	.....	
	(*d*). Grazing and fodder grass ...	.....	26,152 1 6	26,152 1 6	26,152 1 6	.....	
	(*e*). Other minor produce	.....	7,604 9 0	7,604 9 0	7,604 9 0	.....	
	III.—Drift and Waif Wood and confiscated Forest produce	.....	2,347 2 6	2,347 2 6	2,347 2 6	.....	
	Total ...	11,136 14 0	6,54,379 0 5	6,65,515 14 5	6,64,469 10 5	1,046 4 0	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.,

B-827—17 NC

FORM No. 64.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Outstandings and Liabilities on account of Contractors and Disbursers for the Forest Department year 1892-93, extending from 1st April 1892 to 30th June 1893.

Division.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.		REMARKS.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Contractors	Nil.	.....	.....	.....	.....	.....	.....	...	
Disbursers—									
East Thána...	...	74,170 10 6	74,170 10 6	170 11 6	75,640 2 1	75,810 13 7	1,640 3 1	...	
West Thána	...	55,834 8 2	55,834 8 2	.....	58,206 12 0	58,206 12 0	2,372 3 10	...	
Surat	...	48,101 13 7	48,101 13 7	1,344 8 7	49,567 6 11	50,911 15 6	2,810 1 11	...	
Panch Mahálś	...	23,830 8 5	23,830 8 5	.....	24,149 13 10	24,149 13 10	319 5 5	...	
Working Plans	...	2,308 2 11	2,308 2 11	.....	2,308 2 11	2,308 2 11	.....	...	
Bombay Forest Surveys	...	8,079 15 2	8,079 15 2	2,832 3 1	5,247 12 1	8,079 15 2	.....	...	
Total ...	...	2,12,325 10 9	2,12,325 10 9	4,347 7 2	2,15,120 1 10	2,19,467 9 0	7,141 14 3	...	

No. F./16173.

Forwarded to the Deputy Conservator of Forests, Northern Circle, Bándra, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 65.

FOREST DEPARTMENT, BOMBAY, NORTHERN CIRCLE.

Financial Results of the year 1892-93.

Division.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL.		REMARKS.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
East Thána ...	4,986	20,075	1,22,582	23,278	56,933	1,27,568	1,00,286	
West Thána ...	3,612	21,357	3,13,992	29,413	39,454	3,17,604	90,224	
Surat	61,318	24,357	86,199	21,837	28,744	1,47,517	74,438	
Panch Mahals ...	1,915	10,861	88,236	11,771	12,743	90,151	35,375	
Working Plans ..	...	6,641	...	6,641	15,498	...	28,780	
Surveys	...	...	44	...	6,022	44	6,022	
Total ...	71,831	83,291	6,11,053	92,440	1,59,394	6,82,884	3,35,125	

Camp Dahisar, Thána District,
14th November 1893.

F. R. DASAI,
Deputy Conservator of Forests, Northern Circle.

No. 504 OF 1894.

REVENUE DEPARTMENT.

Camp Wajiria, 9th February 1894.

With reference to the Forest Administration Report of the Northern Circle already forwarded to Government with this office No. 297, dated 23rd ultimo, the Commissioner, N. D., begs to make the following remarks.

2. The table in paragraph 4 is not of much use. The number of towns with a population of over 4,000 does not seem to have much to do with the usefulness of the forests. For instance the real factor in the forest revenue of Thána is the proximity of Bombay; again in Surat the forests, which are insignificant, bear no relation to the size of the towns.

3. Paragraph 5 brings out what is a very distinguishing feature of the Northern Circle, and that is the very large forest area which is interspersed with our own, and belongs to Native States. The days of reckless forest mismanagement in these States is slowly but surely coming to an end. Some of their forests will, it is true, take years to recover from the mischief that has been done, but in all the more important States distinct progress is perceptible.

4. With reference to paragraphs 7, 8 and 9, the undersigned considers that it is time that some concerted action should be agreed on as to the order in which the offices of the Forest Settlement, the Forest Survey and the Working Plans should work. At present the three officers above mentioned work independently of each other and of the revision Revenue Survey. It is true that it is not easy to arrange a regular order of sequence, as there are special reasons which affect certain officers: *e. g.*, the Forest Survey has, it is believed, to divide its work every year between the three circles; again the Working Plans are wanted for blocks which have not yet been definitely settled and demarcated. The Commissioner, N. D., has consulted Mr. Sinclair, and hopes shortly to report on the matter.

5. In paragraph 10 the Deputy Conservator alludes to the most important event of the year in the Northern Circle, *viz.*, the Government Resolution deciding finally the vexed question of the Government right to trees in occupied lands. The counting of the exempted trees is a work which is now being done in connection with the revision survey.

6. The change in the area and name of the two Forest Divisions of Thána has been a real improvement. It was suggested by the local knowledge of the Collector and Forest Officers.

7. *Forest Settlements.*—The Western Thána work was put back owing to the unfortunate illness of Mr. McIver, but progress was made. In Eastern Thána, Mr. Orr was not set free from his work in the Kolába District till late in the season. It is to be regretted that his work in the 25 villages had to be upset by Mr. Sinclair for technical reasons, but the information required to complete the decisions is available, and the decisions have presumably been rewritten. As to Surat, the remark in paragraph 29 is at first sight irreconcileable with the figures in the table in paragraph 34, but the foot-note to the latter explains that the expenditure is for the Dángs. The progress in the Panch Maháls is satisfactory, and the Forest Settlement Officer, Mr. Maconochie, has worked well. The work of purchasing the land for the Tánsa catchment area was also practically completed by the Special Officer Mr. Nabar.

8. The progress of the survey work under the supervision of Colonel Hutchinson appears to be satisfactory.

9. The Working Plans Officer has this year worked only in the Northern Circle. The Government of India have accepted the fact that working plans based on area are suitable for the Thána District. The forecast of the time and cost required for laying each coupe and compartment will, it is presumed, be noticed in the report for 1893-94.

A fair amount of work has been done by Mr. Fry.

The system appears to work on the whole well for Thána. The same system is not applicable to the small but valuable forest patches in the south of the Surat Collectorate, nor for other reasons is it likely to suit the less valuable Mándvi Forests. For the Panch Maháls a system of working plans will have to be drawn up, but it is probable that the Thána system will require considerable modification to suit this district.

10. The new cattle-pounds in the Thána Forests have been a great success, as is shown by the remarks in paragraph 102. These pounds may well be introduced in other divisions and circles.

11. Under the head of General Protection, it is interesting to see that the Collector of Thána writes:—

"The wholesale systematic theft by capitalists employing large establishments, which I have myself seen, has now disappeared."

With regard to the petty thefts he says:—

"They are as a matter of fact the remnant of the old unlimited use of the forest (except the reserved 'Royalty trees') which was, under the Marátha Government, conditional on payment of a Forest cess, and was, even in Captain Francis' earliest revenue survey and settlement in the Konkan (that of Nasrápur), deliberately taken into account in assessing rice land.

"4. The habit of such use is not broken up in a day, and the serious protection of even the Royalty trees has been set about within my own time."

The remarks of the Deputy Conservator, 62 to 68, deserve serious attention. The importance of the Thána Forests and the revenue derived from them is so great that an increase in the subordinate staff is very necessary. In a short time the increased efficiency would pay for the increased expenditure.

12. *Breaches of Forest Law.*—The report does not show any startling increase or decrease, except in East Thána. Thána is by far the most important part of the circle, and the forest convictions have been carefully supervised by Mr. Sinclair. The analysis of the 419 cases compounded under Section 67 of the Forest Act shows that the section has not been abused, and as five-eighths of the cases were compounded for a rupee or under, it has evidently been leniently worked.

13. *Protection from fire.*—The Thána system has already met with the approval of the Government of India. Next year's report ought to show that the working of this system has been well established in the other districts. In depopulated areas like the Tánsa catchment village, officers have of course ceased to exist, and the strength of the Forest staff must be strengthened. Attention is requested to the good report of the work of the West Thána and Surat officers.

14. The system of closure for grazing differs so in different parts that it is not easy to draw any comparison between districts. The percentage of closure in Surat seems far too high if it includes the whole of Mándvi. But it is to be remembered that it is only a *close season* and not a total closure, and that probably the villagers benefit by the protection to the grass. The increase in impounding in Mándvi has attracted the Collector's attention, and will be watched by him.

15. Natural reproduction has been good in Thána and in the southern parts of Surat. In this as in many ways Mándvi and the Panch Maháls stand in need of attention.

16. The experiments with casuarina though not uniformly successful show that it can be grown to advantage.

17. It will be seen from paragraph 135 that in the case of the unsold coupes in East Thána the Forest Department did not carry out strictly the orders of Government Resolution No. 7107 of 6th September 1892. But the reason given for this deviation is sufficient, as it was done with the consent of the Revenue authorities, who were convinced that the small branch wood was not wanted for ráb supply.

18. The important question of grazing might have received more attention in the report. The Collector should explain the difference in the East and West Thána figures. It is not understood why foreign cattle, if willing to pay the fees, should have been excluded in the Panch Mahâls.

19. The Commissioner trusts that Government will accept the arrangements made throughout the circle for the collection of minor forest produce. There is no reason to believe that the restrictions now imposed weigh at all harshly on the poorer classes. (See also paragraph 172.)

20. The plan for using the Ambika River for floating down the timber from the Dángs (see paragraphs 137, 138 and 160) will, if successful, open out a large field for the produce of these forests. During last year (see paragraph 208) the Deputy Conservator asked for leave to open a wood depôt on the shore of the Tápti for the supply of Surat. The timber was to have been floated down from the Mándvi forests. Unfortunately the Military authorities have vetoed this, as the Depôt was within cantonment limits. It is hoped that this difficulty may be removed, as the place is most suitable, and the benefit both to the inhabitants of Surat and the Department would be very great.

21. The figures in paragraph 164 show clearer than any lengthened description the difference between the East and West Thána Forests. The opening out of roads will improve the former to some extent, but nothing can ever make up for the nearness to the sea and the rail of the western portion.

22. The financial results are satisfactory.

23. This is the first report for the Northern Circle submitted by Mr. Desái, and the Commissioner trusts that Government will agree with him that it shows that Mr. Desái has grasped the idea of the duties of this important post. He has now made himself acquainted with every part of his charge, and his visit to the Dángs has already borne good fruit.

24. Mr. Millett has continued to deserve the character that he has already earned as an excellent officer. Mr. Greatheed was new to the District and suffered a great deal from fever. Mr. Wallinger has received commendation from the Collector and the Deputy Conservator. The Deputy Conservator commends the work of Mr. Rebeiro and Mr. C. G. Dalia, Sub-Division Officers.

25. The Commissioner has much pleasure in concurring with the Deputy Conservator in his remark that he has enjoyed the hearty co-operation of the Collectors of Thána and Surat. Both these officers take the greatest interest in the forest work of their districts, as is well known to Government. The result is shown by the entire absence of friction between the Revenue and Forest Departments.

G. B. REID,
Commissioner, N. D.

CENTRAL CIRCLE.

No. 4933 of 1893-94.

FROM

THE HONOURABLE MR. A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle;

To

G. W. VIDAL, Esq.,
Chief Secretary to Government,
Revenue Department,
Bombay.

Camp Ahmednagar,
8th January 1894.

SIR,

I have the honour to submit herewith the Forest Administration Report of the Central Circle for the forest year 1892-93, together with its prescribed subsidiary statements.

I have the honour to be,
Sir,
Your most obedient Servant,
A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

THROUGH THE COMMISSIONER, CENTRAL DIVISION.

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FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE, BOMBAY PRESIDENCY, FOR THE FOREST YEAR 1892-93.

INTRODUCTION.

The Forest year 1892-93 will be a marked year in the annals of the forest history of the Presidency, for the reasons—

First, that under orders contained in Government Resolution No. 8315, dated 22nd October 1892, in the Revenue Department, the old Northern Circle has been divided into two circles, which are called, respectively, the Northern and the Central; the former being placed in charge of Mr. F. R. Dasái, Deputy Conservator of Forests, 1st Grade, while the latter remained in charge of Mr. A. T. Shuttleworth, Conservator of Forests, 1st Grade;

Second, that the reorganization of the superior staff of the Forest Department of the Presidency, according to the scheme which had been sanctioned by the Secretary of State for India, was brought into effect during the year, from the 1st April 1892; and

Third, that under orders of the Government of India contained in Government Resolution No. 5506, dated 6th July 1892, a new forest year embracing the period from 1st July to 30th June has been adopted for the preparation and submission of Forest Administration Reports; and consequently, to fit in with this change, the present Administration Report extends over a period of fifteen months, from 1st April 1892 to the 30th June 1893.

2. Forest reservations in the Central Circle have undergone very slight changes, which give a net increase in area of 11 square miles and 314 acres.

3. No settlement work in respect of lands notified under Section 34 of the Forest Act during 1879, remains to be completed in any of the divisions of the Central Circle; but forest and waste lands which have been provisionally notified under Sections 4 and 28 of the Forest Act, amounting to 424 square miles and 56 acres, were still undergoing settlement enquiries when the year came to a close.

4. The selection of forest or waste lands for reservation under the Forest Act, is also completed throughout the Circle, with the exception of a few localities in one táluka of the West Khándesh Division; but the work of demarcating upon the ground the sanctioned forest boundaries, by the erection of special forest boundary marks, still remains to be undertaken, more or less, and to a greater than to a lesser extent, in almost all the divisions of the Central Circle.

5. 28,193 special forest boundary marks were erected at a cost of Rs. 11,082 to define 1,730 linear miles of the forest boundaries during the year.

6. No new privileges upon the forests were granted to the people during the year; but some slight modifications were made in the North Tápti Privilege Code, under the authority of Government Resolution No. 2259, dated 28th March 1893, in the shape of a reduction in the scale of fees charged on bamboos.

7. The Forest Survey Party of the Government of India carried on its operations in the divisions of Poona and Sholápur only of the Central Circle; and the cost thereof during the forest year amounted to Rs. 31,082.

8. The Working Plans branch of the old Northern Circle was transferred to the new Northern Circle, and no Working Plans division has been created in the Central Circle; consequently there is nothing special to record under Working Plans, save that in all the divisions the differentiation of the forest areas into forest-blocks, and the sub-division of the latter into compartments, has been

started, and has made such considerable progress in some parts that compartments have been formed into coupes, which have been subjected to the exploitation of the timber, firewood, &c., they contained for trade purposes, and to meet the demands of local supply.

9. The number of forest offences for which prosecutions were instituted and disposed of by Magistrates came to 1,402; and that of cases compounded by the Divisional Forest Officers under Section 67 of the Forest Act, came to 9,647 during the fifteen months.

10. The number of cattle of different kinds impounded for trespassing into closed portions of forest reservations, as also for grazing without permits in open forests, numbered 381,459 during the forest year, against 334,640 in the preceding year of twelve months.

11. "Fire-conservancy" has received very close and considerable attention, and the results are on the whole satisfactory, and especially in the West Khándesh Division, although a comparison between the figures of 1891-92 and of 1892-93, may not appear to be so; but it should be remembered that the latter represent the results of two hot seasons.

12. The rainfall was seasonable in almost all the divisions of the Central Circle; and consequently reproduction, both natural and artificial, was generally fair and promising.

13. The financial results of the year were on the whole satisfactory; the net surplus amounting to Rs. 2,35,503.

14. Mr. A. T. Shuttleworth was in charge of the Central Circle throughout the year; and the following statement will show the names of superior Forest Officers who have been conducting the administration of the forests of the different divisions of the Central Circle, during the period of this report, and the stations they have occupied, with other particulars.

No.	Forest Division.	Name of Officer.	Rank.	Designation.	From	To	Remarks.
1	East Khándesh.	Mr. F. R. Dasái ...	Deputy Conservator, 1st Grade.	Divisional Forest Officer.	1st April 1892...	4th Aug. 1892.	
		„ E. G. Oliver ...	Do. 4th Grade,	Do. ...	5th Aug. 1892...	15th Nov. 1892.	
		„ R. H. Madan ...	Sub. *pro-tem.* Extra Assistant Conservator, 1st Grade.	Do. ...	16th Nov. 1892...	2nd May 1893.	
		„ L. D. Joshi ...	Extra Assistant Conservator, 1st Grade.	Do. ...	3rd May 1893 ...	22nd do..	
		„ E. G. Oliver ...	Deputy Conservator, 4th Grade.	Do. ...	23rd do. ...	19th June 1893.	
		„ R. H. Madan ...	Sub. *pro-tem.* Extra Assistant Conservator 1st Grade.	Do. ...	20th June 1893...	30th do.	
		„ B. H. Dalál ...	Do. 4th Grade.	Subdivision Forest Officer.	*20th June 1892.	14th Dec. 1892.	*New subdivision created from 20th June 1992.
		„ L. D. Joshi ...	Extra Assistant Conservator, 1st Grade.	Do. ...	15th Dec. 1892.	†22nd May 1893.	†Sub-division office abolished on 22nd May 1893.
2	West Khándesh.	Mr. E. G. Oliver ...	Deputy Conservator, 4th Grade.	Divisional Forest Officer.	1st April 1892...	18th April 1893.	
		„ R. H. Madan ...	Sub. *pro-tem.* Extra Assistant Conservator, 1st Grade.	Do. ...	19st April 1893...	1st May 1893.	
		„ B. H. Dalál ...	Do. 4th Grade.	Do. ...	2nd May 1893...	18th do.	
		„ E. G. Oliver ...	Deputy Conservator, 4th Grade.	Do. ...	19th do. ...	30th June 1893.	
		„ G. S. Hinge ...	Extra Assistant Conservator, 3rd Grade.	Sub-division Forest Officer.	1st April 1892...	12th April 1892.	
		„ E. G. Oliver ...	Deputy Conservator, 4th Grade.	Do. ...	13th do. ...	12th May 1892.	
		„ G. S. Hinge ...	Extra Assistant Conservator, 3rd Grade.	Do. ...	13th May 1892 ...	17th Dec. 1892.	
		„ B. H. Dalál ...	Sub. *pro-tem.* Extra Assistant Conservator, 4th Grade.	Do. ...	18th Dec. 1892 ...	30th June 1893.	
3	Násik	Mr. W. G. Betham ...	Acting Deputy Conservator, 1st Grade	Divisional Forest Officer.	1st April 1892...	30th June 1893.	
		„ W. A. Wallinger.	Extra Assistant Conservator, 2nd Grade.	Sub-division Officer.	Do. ...	1st Sept. 1892.	
		„ W. R. Gaundé ...	Do. 1st Grade.	Do. ...	2nd Sept. 1892...	30th June 1893.	
4	Ahmednagar ...	Mr. A. D. Wilkins ...	Deputy Conservator, 3rd Grade.	Divisional Forest Officer.	1st April 1892...	9th June 1892.	
		„ S. Hornidge ...	Acting do. ...	Do. ...	10th June 1892...	30th June 1893.	

No.	Forest Division.	Name of Officer.	Rank.	Designation.	From	To	Remarks.
5	Poona	Mr. R. C. Wroughton.	Deputy Conservator, 1st Grade.	Divisional Forest Officer.	1st April 1892...	20th April 1892.	
		,, F. Gleadow ...	Do. 3rd Grade.	Do. ...	21st do. ...	9th Sept. 1892.	
		,, A. D. Wilkins ...	Do. do. ...	Do. ...	10th Sept. 1892 ..	30th June 1893.	
		,, W. R. Gaundé ...	Extra Assistant Conservator, 1st Grade.	Sub-division Forest Officer.	1st April 1892...	4th May 1892.	
		,, F. Gleadow ...	Deputy Conservator, 3rd Grade.	Do. ...	5th May 1892 ...	3rd June 1892.	
		,, J. H. Clabby ...	Extra Assistant Conservator, 2nd Grade.	Do. ...	4th June 1892...	27th June 1893.	
		,, A. D. Wilkins ...	Deputy Conservator, 3rd Grade.	Do. ...	28th June 1893...	30th do.	
6	Sátára	Mr. R. S. F. Fagan ...	Do. do. ...	Divisional Forest Officer.	1st April 1892...	30th do.	
		,, L. D. Joshi ...	Extra Assistant Conservator, 1st Grade.	Sub-division Forest Officer.	Do. ...	3rd Dec. 1892.	
		,, B. M. Khárkar ...	Huzúr Deputy Collector, Sátára.	Do. ...	4th Dec. 1892 ...	19th do.	
		,, G. S. Hinge ...	Extra Assistant Conservator, 3rd Grade.	Do. ...	20th do. ...	30th June 1893.	
7	Sholápur ...	Mr. S. Hornidge ...	Acting Deputy Conservator, 3rd Grade.	Divisional Forest Officer.	1st April 1892 ..	27th do.	
		,, J. H. Clabby ...	Extra Assistant Conservator, 3rd Grade.	Do. ...	28th June 1893 ...	30th do.	

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i). ALTERATION IN AREA.

15. The year opened with 5,711 square miles and 605 acres of reserved forests, and 190 square miles and 100 acres of protected forests, making a total of 5,902 square miles and 65 acres in the charge of the Forest Department, scattered over the seven divisions which compose the Central Circle. 20 square miles and 584 acres were added to reserved forests under Section 19 of the Indian Forest Act, and 9 square miles and 93 acres were excluded from reserved forests under Section 26 of the Act. No additions have been made to the protected forests, but on the other hand, 177 acres have been excluded from protected forests during the fifteen months. And the total area of forest reservations in the Central Circle, at the close of the forest year, on the 1st July 1893, amounted to 5,913 square miles and 379 acres, made up of 5,723 square miles and 456 acres of reserved, and 189 square miles and 563 acres of protected forests, showing a net increase of 11 square miles and 314 acres in all. The particulars of each division are to be seen in Forms Nos. 46 and 46-A. attached to this report.

(ii). FOREST SETTLEMENTS.

16. The forest settlement work is practically finished in all the divisions of the Central Circle, for the forest conservancy project of every táluka has been drawn up, approved and sanctioned by Government. No settlement work in respect of lands notified under Section 34 of the Forest Act during 1879, remains to be done, but claims attaching to forest and waste lands, provisionally notified under Sections 4 and 28 of the Forest Act, were being inquired into, settled and recorded by the Forest Settlement Officers. In addition to this the Forest Settlement Officers were engaged in acquiring occupied lands included within the sanctioned projects of forest reservations, and in preparing forest registers, &c.; and the following is a short summary of the Settlement Officers' proceedings during the year.

Khándesh Collectorate.

17. Mr. C. G. Dodgson, I.C.S., was the Forest Settlement Officer, specially appointed, from 1st April 1892 to 5th August 1892, when he was transferred to act as Under Secretary to Government, in the Revenue Department, for three months, and on being relieved from that duty he proceeded on three months' privilege leave of absence, and finally returned on the 21st February 1893 and re-assumed charge of the Forest Settlement Office from Mr. A. Lucas

I.C.S., who had acted during his absence; and Mr. Dodgson, continued to hold that appointment up to the end of the forest year.

During the months of April and May 1892, the demarcation upon the ground of the boundaries of Bhil settlements, which are enclosed by the Akráni-Narbada reserved forest, was completed, as well as the demarcation on the ground of the southern boundary line of the reserved forest, which had been left unfinished in 1891-92. During the rainy season, reports were submitted on the above work, as well as on the forest conservancy project of the Sindkheda Táluka, and of the southern portion of the Pimpalner Táluka.

On his return from privilege leave in February, Mr. Dodgson proceeded to the Akráni Pargana to hold local inquiries into any private rights which might be claimed in respect of, or found to be attaching to, the Akráni-Narbada proposed reserved forest, and on finishing this work he received charge of the Assistant Collector's office of the western division of Khándesh from Mr. Lucas, who was proceeding on furlough; and since then he has been in charge of the Forest Settlement Office in addition to his duties as Assistant Collector. In April and May 1893, Mr. Dodgson settled claims to forest rights in the Navápur Petha and in the northern part of the Pimpalner Táluka, where certain lands had been notified provisionally as reserved forest under Section 4 of the Forest Act.

The detailed inquiries into the forest rights of Inámdárs, which have been going on for years, have been completed, and the final reports have been submitted; so that there are now only 4 villages in respect of which orders of Government remain to be issued.

Certain occupied lands inside forest boundaries were acquired for conversion into reserved forests, by payment of compensation, or by giving other lands in exchange for them, in the Amalner Range; these with the lands acquired last year in the Erandol Táluka were notified under Section 4 of the Forest Act. Similar notifications were also submitted for publication regarding other occupied lands acquired in the Jámner, Amalner and Páchora tálukas.

The areas added to reserved forest during the year are distributed thus:—

Range.	Area.	
	Sq.m.	Acres.
Savda	1	383
Chopda	2	402
Bhusával	2	203
Shirpur	1	60
Nandurbár	2	215
Total ...	9	623

The occupied lands obtained on payment of compensation are distributed thus:—

Range.	Area.	Compensation.
	A. g.	Rs. a. p.
Jámner ...	161 0	702 6 2
Amalner ...	388 38	1,005 3 4
Páchora ...	1 17	5 0 0
Total ...	551 15	1,712 9 6

The area disforested during the year is returned as under:—

Range.	Area.	
	Sq.m.	Acres.
Páchora	1	328
Shirpur	...	197
Nandurbár	1	190
Pimpalner	1	569
Total ...	5	4

About 199 square miles and 95 acres of reserved forests and 218 square miles and 346 acres of protected forests, in charge of the Forest Department and provisionally notified, remained to be finally settled and gazetted, in the Khándesh District, on the 30th June 1893.

Mr. Dodgson has, as usual, worked with great zeal, activity and energy for the forest interests of Government, with a careful regard for the satisfaction of the wants of the wild tribes, and for the demands of agriculture.

Násik Collectorate.

18. There has been no special Forest Settlement Officer for this district, as the work of settlement has been practically completed long ago, but some occupied lands, which are inside the sanctioned forest boundaries, remain to be acquired, and the settlement, after provisional notification of such portions of these as are obtained, from time to time, is carried on by the Assistant Collectors of the district, who have been appointed *ex-officio* Forest Settlement Officers, in respect of their revenue sub-division, for the purpose. 198 acres were acquired and provisionally notified under Section 4 during the year, and 194 acres were finally notified under Section 19 of the Forest Act.

Ahmednagar Collectorate.

19. Mr. V. B. Vadekar was special Forest Settlement Officer throughout the year. Forest-settlement work is practically finished, but the work of acquisition, by purchase or by exchange, of lands at present in occupation which are inside the sanctioned forest-boundaries, still remains to be completed, and the preparation of forest registers containing a complete record of rights in respect of the forest area of every range, has to be prepared: 219 acres of occupied lands were acquired by exchange, and 81 acres by payment of compensation at a cost of Rs. 677, for conversion into reserved forest. A very large area of occupied lands, amounting to no less than 26,524 acres enclosed within reserved forests, still remains to be acquired. Some of the acquired lands were notified under Section 4, and were also duly settled. Forest registers of the Shrigonda, Nevása, Shevgaon, Ráhuri, Kopargaon, Sangamner and Akola tálukas, and those of the Railway B. class forest lands of 52 villages were prepared and furnished for the use of Village Officers and Range Forest Officers. Lists giving the old revenue survey numbering of the forest lands notified from time to time under Sections 19, 28 and 34 of the Forest Act, with the corresponding numbering according to the Revision Survey, or in other words, the revised description of boundaries of these reserved forests for the tálukas of Ráhuri, Shrigonda, Párner, Sangamner, Kopargaon and Akola, were also prepared and published in the *Government Gazettes.*

Mr. Vadekar has done a year's good substantial work, and the Conservator has much pleasure in testifying to the fact.

Poona Collectorate.

20. Mr. C. P. B. Wiltshire, I. C. S., was in charge of the forest settlement office throughout the year, in addition to his own revenue and magisterial duties as First Assistant Collector. 911 acres of occupied lands within the sanctioned forest boundaries were acquired for conversion into reserved forest. 906 acres of

this quantity were obtained by giving other waste lands in exchange for them, and 5 were secured by payment of compensation, amounting to Rs. 40. Settlement inquiries were made in the tálukas of Bhimthadi, Mával, Haveli, Junnar and Sirúr, and 791 acres were thus finally settled, and draft notifications in respect of them under Section 19 will be submitted after the period of appeal has expired. Settlement inquiries in repect of the Inám village of Khor, in the Bhimthadi Táluka, have also been completed. The Forest Settlement Officer has commenced preparing lists for publication showing the forest areas as described, according to the old survey, in the original notifications, and the corresponding survey numbers with areas under the Revision Survey, and the statements for táluka Khed and Ámbegaon petha have been submitted to Government, with a view to their publication in the *Government Gazette*. The preparation of forest registers, in English, in the form prescribed in the Forest Department Code, was also taken in hand; and registers for the tálukas of Indápur, Mával and Junnar have been prepared and sent to the Divisional Forest Officer. 1,274 acres were disforested during the year, and 1,702 acres have been notified under Section 4.

The special arrangements which Mr. Wiltshire has effected, since he has been in charge of the settlement office, for the obtainment of occupied lands situated within the sanctioned forest boundaries for their conversion into reserved forest, by exchanges, &c., would seem to be very satisfactory, and to the interests of both the Revenue and Forest Departments.

Sátára Collectorate.

21. There was no special Forest Settlement Officer for this collectorate up to 3rd December 1892, and the Assistant Collectors were *ex-officio* Forest Settlement Officers for their own revenue jurisdictions, respectively, up to that time; but Government in their Resolution No. 7897, dated 5th October 1892, in the Revenue Department, appointed Mr. S. R. Arthur, I. C. S. to be special Forest Settlement Officer of the Sátára District; and he accordingly took charge of his duties on 3rd December 1892, and up to the end of April 1893, visited the tálukas of Khánápur, Koregaon, Wái, with Khandála Petha, Jávli, Khatáv, Tásgaon, Válva and Pátan, but he unfortunately met with a gun accident on the 30th April, while in the Pátan Táluka, and from that date forward was unable to attend to out-door duties, though he carried on the office work, but as it was near the close of the travelling season the delay in the out-door work has been inconsiderable.

The principal items of work performed by the Forest Settlement Officer were:—

(1). Preparation of forest registers for each range.

(2). Comparison and correction of village forest registers.

(3) Submission of draft notifications under Sections 4 and 26 of the Forest Act, and of *errata* where necessary.

(4). Enquiry under Section 6 of the Forest Act into private rights and rights of way, &c.

(5). Submission of reports on the forest rights of Inámdárs.

Enquiries into private rights appear to have been conducted with great care, and no appeals were presented to the Collector. The work of effecting exchanges of lands in the Pátan Táluka and the Shirála Petha, for the acquisition of such occupied lands as were located within the sanctioned forest boundaries, has made considerable progress, and what remains to be done in this direction is being pushed on rapidly.

The Conservator cordially endorses the opinion of the Collector, that "Mr. Arthur has worked with assiduity and care and has given me satisfaction."

Sholápur Collctorate.

22. The forest settlement of the Collectorate is practically finished, but here also the work of acquiring some lands at present occupied, and which are

situated within the sanctioned forest boundaries, remains to be accomplished. The Deputy Collector, who has been in charge of the Forest Settlement Office throughout the year, in addition to his own revenue and magisterial duties, has seemingly been unable to effect any acquisitions, either by exchanges or by purchase, during the year. Settlement inquiries in respect of 142 acres, which, though acquired before the year opened, were provisionally notified under Section 4 during the year, were still undergoing at the close of the year.

23. The following is a complete statement of the forest and waste lands, provisionally notified under Sections 4 and 28 in the several divisions of the Central Circle, the settlement inquiries in respect of which still remained to be undertaken at the close of the forest year :—

No.	Division.	Section 4.		Section 28.		Total.	
		Sq.m.	Acres.	Sq.m.	Acres.	Sq.m.	Acres.
1	East Khándesh ...	11	373	...	...	11	373
2	West Khándesh ...	187	362	218	346	406	68
3	Násik	...	198	...	...	...	198
4	Ahmednagar	...	579	...	...	...	579
5	Poona	2	422	...	...	2	422
6	Sátára	2	194	...	...	2	194
7	Sholápur	...	142	...	...	...	142
	Total ...	205	350	218	346	424	56

24. And the following statement exhibits the area acquired by exchange and by purchase, together with the amount paid in compensation and the average rate per acre, in the several divisions of the Central Circle :—

No.	Division.	Area acquired.		Amount of Compensation paid.	Average Rate per Acre.
		By exchange.	By purchase.		
		Acres.	Acres.	Rs.	Rs. a. p.
1	East Khándesh ...	.....	551	1,713	3 1 8
2	West Khándesh ...	.....	.....	.....	.....
3	Násik	.....	.....	.....	.....
4	Ahmednagar	219	81	677	8 5 8
5	Poona	906	5	40	8 0 0
6	Sátára	300	30	10	0 5 4
7	Sholápur	.....	.....	.....	.....
	Total ...	1,425	667	2,440	3 10 6

Privileges.

25. No new concessions, in the way of privileges on the forests, were granted to the people during the year; some slight modifications were, however, made in the North Tápti Privilege Code, under the authority of Government Resolution No. 2259, dated 28th March 1893, in the Revenue Department, whereby a reduction of 25 per cent. in the scale of fees charged on bamboos was effected; and Government in their Reslution No. 9846, dated 15th December 1892, in the Revenue Department, have directed that the collection and sale of articles of minor forest produce should be left free and unrestricted, save

(1) Articles for which a trade demand exists, or for which there is a reasonable probability that such demand may in time be created, and

(2) Articles such as catechu the collection or manufacture of which it is necessary in the interests of forest conservancy to keep under effective control.

26. The following statement shows the cost of Forest Settlement Officers and their establishments entertained in the several divisions of the Central Circle :—

No.	Division.	Forest Settlement Officers.		Office Establishments.		Contingencies.	Total.
		Pay.	Travelling allowance.	Pay.	Travelling allowance.		
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	East Khándesh	7,796	1,450	4,894	1,696	502	16,338
2	West Khándesh			480	210	165	855
3	Ahmednagar	...	...	1,467	540	478	2,485
4	Poona...	...	...	1,114	36	491	6,536
5	Sátára	3,687	1,208				
	Total ...	11,483	2,658	7,955	2,482	1,636	26,214

The pay and travelling allowances drawn by the Forest Settlement Officers themselves are not charged in the forest accounts, but only the cost of their establishments and their contingent expenditure: thus the total amount debited in the forest accounts under A. VIII. *b*. "Compensation for land and rights" amounted to Rs. 12,073.

27. The selection of lands for forest reservations has been, practically, finished in all the divisions of the Central Circle, except in one táluka of the West Khándesh Division, as will be seen from the statement given below. :—

No.	Division.	Number of Tálukas.	Number of Tálukas,			Remarks.
			in which demarcation has been completed and sanctioned.	in which demarcation is incomplete.	in which demarcation is not undertaken.	
1	East Khándesh	9	9	...	...	
2	West Khándesh	7	6	*1	...	*Pimpalner.
3	Násik	12	12	...	...	
4	Ahmednagar	11	11	...	...	
5	Poona	8	8	...	...	
6	Sátára	11	11	...	...	
7	Sholápur	7	7	...	...	
	Total ...	65	64	1	...	

(iii). DEMARCATION.

28. The work of demarcating upon the ground, approved and sanctioned forest boundaries by the erection of special forest boundary marks still remains to be done, more or less, to a much greater extent than has been accomplished up to date, in almost all the divisions of the Central Circle; and the following statement will show the progress made during the year :—

No.	Division.	Length of boundaries in miles.	Number of Cairns erected.			Cost.
			Large.	Small.	Total.	
1	East Khándesh...	4	18	...	18	58
2	West Khándesh...	451	644	3,742	4,386	1,978
3	Násik	319	1,216	8,816	10,032	3,929
4	Ahmednagar	117	2,140	1	2,141	1,171
5	Poona	178	3,225	635	3,860	1,846
6	Sátára	528	492	5,740	6,232	1,583
7	Sholápur	133	23	1,501	1,524	517
	Total ...	1,730	7,758	20,435	28,193	11,082

29. The outer boundary demarcation of forest reservations in East Khándesh has been completed to a great extent by the Forest Settlement Officer, but as the boundary marks are too far apart to be visible one from the other, intermediate marks have still to be erected in many places to connect the existing ones, and this work will now be pushed on with vigour; during the year of this report only 18 new pillars were erected, but such of the old boundary marks as required to be repaired were put into order.

30. In the West Khándesh Division Rs. 1,978 were expended, mainly by the Forest Settlement Officer, whose surveyors are employed in building the forest boundary marks, and they erected 509 large and 3,557 small pillars at a cost of Rs. 1,632; while 135 special forest boundary marks of the 1st class, and 185 of the 2nd class, were newly erected; and 2,905 boundary marks which had been constructed in preceding years, and had become dilapidated, were re-constructed by the Divisional Forest Officer at a cost of Rs. 346.

31. In the Násik Division 1,968 new cairns were erected in the Peint Táluka at a cost of Rs. 88; and in other ranges 8,064 marks were put up at an expenditure of Rs. 2,688; 6,445 cairns were also repaired at Rs. 1,153.

(iv). SURVEYS.

32. The Forest Survey branch of the Government of India, working in the Central Circle, was in charge of Colonel Hutchinson, with Messrs. A. M. Lawson, S. F. Norman and C. A. Norman as his Assistants, throughout the year, and carried on its operations in the divisions of Poona and Sholápur only; and the following statements will show a comparison of the work performed and the expenditure incurred during the survey years ending 30th September 1892 and 30th September 1893, as directed in Government Resolution No. 4515, dated 3rd July 1891, in the Revenue Department.

Statement showing the amount and cost of work done by No. 17 Party (Bombay Forests), in the Central Circle, during the Survey year ending 30th September 1892.

District.	Táluka.	Triangulation.		Traversing.		Topography.				Total.	Remarks.
						8″		16″			
		Area.	Cost.	Area.	Cost.	Area.	Cost.	Area.	Cost.		
		Sq.m.	Rs.	Sq.m.	Rs.	Sq.m.	Rs.	Sq.m.	Rs.	Rs.	
Poona ...	Junnar... ...	163	484	(a)23	497	...	...	...	...	981	(a) 180 linear miles all in advance.
	Haveli	75	1,747	...	...	50·75	6,730	...	...	8,477	
	Indápur ...	...	...	...	...	...	...	15·39	2,884	2,884	
Ahmednagar ...	Akola	220	411	...	...	...	...	...	...	411	
Sholápur ...	Karmála and Mádha ...	...	...	...	...	...	...	(b)24·43	4,578	4,578	(b)Karmála (13·74) and Mádha (10·69).
		458	2,642	23	497	50·75	6,730	39·82	7,462	17,331	
Cost per square mile ...		...	5 12 4	...	21 9 8	...	132 9 9	...	187 6 4	...	

Statement showing the amount and cost of work done by No. 17 Party (Bombay Forests), in the Central Circle, during survey year ending 30th September 1893.

District.	4″ Triangulation.		8″ Topography.		16″ Topography.		Total.	Remarks.
	Area, Square miles.	Cost.	Area, Square miles.	Cost.	Area, Square miles.	Cost.		
		Rs.		Rs.		Rs.	Rs.	
Poona	230	3,318	...	...	...	...	3,318	Junnar 80 and Haveli 150.
„	...	...	109	15,157	...	...	15,157	Junnar 96·75 and Haveli 12·25.
„	...	...	...	...	15·50	4,080	4,080	Indápur 9, Khed 3·35. Bhimthadi 2·97 and Mával 0·18. Karmála.
Sholápur... ...	...	...	...	...	6·0			
Total ...	230	3,318	109	15,157	21·50	4,080	22,555	
Cost rate ...	...	14 6 10	...	139 0 11	...	189 12 3	...	

33. The cost of the topography on both the 8″ and the 16″ scales are slightly greater this year than last, but the difference is so small that the Superintendent has given no explanation on the point. The 16-inch work of the riparian bábul reserves was first commenced in the Poona and Sholápur divisions. 8 sub-surveyors with their squads were equipped and despatched from Poona about the 15th of October; 3 of these went to the neighbourhood of Indápur on the Poona and Sholápur boundary, and Mr. A. M. Lawson was told off to follow and examine their work on the close of his recess duties. The remaining 5 commenced work on the Bhima river in the Poona District, and were afterwards visited and superintended by Colonel Hutchinson and Mr. C. Norman. The work on the Bhima, however, proved very scattered and not extensive as regards the area, so the ground was soon completed, and this establishment had to be moved on to the Nira river, south of Poona.

34. Recess at Poona was closed at the end of October, and the rest of the plane-tablers then moved out under Mr. S. F. Norman to take up the 8″ detail survey in the Junnar Táluka, whilst Colonel Hutchinson and Messrs. Lawson and C. Norman proceeded to superintend the 16″ survey work, which was brought to a close at the end of December.

35. The 8″ work in the Junnar Táluka closed at the end of February 1893, and the establishment then moved into the Thána District.

36. The area triangulated upon in the Haveli Táluka of the Poona District forms the head of the Mutha river valley; it is hilly and has a good deal of verdure on it, but the tops of the spurs and hills are mostly clear of forest, so that it presents no exceptionable difficulties to triangulation. Its climate is perfect, being close to the edge of the Western Ghats, and it is accessible as being close to Poona and the Railway line. The ground in the Junnar Táluka is bare of timber, but is rugged and mountainous; it is easy of triangulation and readily admits of minute work being done.

37. The ground of the bábul reserves surveyed on the 16″ scale on the Bhima river in the neighbourhood of Indápur, falling into the Poona and Sholápur districts, was flat and most of it poorly wooded, though some of the blocks contained closely grown and valuable bábul timber. The blocks were not very much scattered, and some of them were large, while the details on the ground were few, so that a fair area was surveyed pretty rapidly.

38. The work, on the 16″ scale, of the bábul reserves on the Bhima and Pauna rivers in the Khed and Mával tálukas of the Poona District, was done under Colonel Hutchinson and Mr. C. Norman. It consisted mainly of fringes of bábul growth on the banks of the rivers, and much scattered, so that the sub-surveyors lost much time in moving from one bit of work to another. The

character of the ground was much of it hilly and raviney, whilst the attenuated and contorted shapes of the blocks involved a good deal of survey, but enclosed very little actual forest area.

39. The 16″ work on the Nira river in the Bhimthadi Táluka of the Poona District much resembles that on the Bhima and Pauna rivers, and there is comparatively little area to show for a considerable amount of survey and labour undergone.

40. The ground treated under the topographical survey on the scale of 8″ to the mile is most of it mountainous and rugged in the extreme, and also raviney; but being sparsely covered with timber, there was no difficulty in seeing the features of the ground, some of them on a very vast scale, and of most extraordinary shapes, and admitting of survey in great minute detail: it has been excellently rendered, and the maps are perfect pictures of the ground.

41. The total expenditure on forest surveys during the forest year ending 30th June 1893, is Rs. 31,082. The Superintendent reports that the year's work may be regarded as very satisfactory; and the Conservator has much pleasure in testifying to the zeal and energy with which Colonel Hutchinson and his Assistants have performed their duties during the year of this report.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—REGULATION OF MANAGEMENT.

(*a*). Working Plans.

42. The Working Plans Officer with his staff, forming the Working Plans Division of the old Northern Circle, having been attached to the new Northern Circle when the two new circles were made, and no Working Plans Officer having been appointed to, and no Working Plans Division having been created for, the Central Circle, there have been no special arrangements for preparing working plans of the forests in the Deccan during the year of this report; but the several Divisional Forest Officers have, in addition to their other duties, undertaken the differentiation of their forest areas into forest blocks with the sub-division of the latter into compartments, and considerable progress has been made in this direction during the year, as will be seen.

43. Mr. Madan, Divisional Forest Officer, East Khándesh, has divided the Trans-Purna bábul reserves into two blocks, and each block into 40 compartments, for the exploitation of bábul (Acacia arabica) and subsequent restocking the worked area by ploughing the ground and sowing seeds of Acacia arabica mixed with nim (Melia azadirachta), blackwood (Dalbergia latifolia) and such other valuable species as are likely to thrive upon the soil. The forest areas in the Páchora and Jámner ranges have been provisionally differentiated into blocks with a view to their sub-division into compartments.

44. In the Násik Division the forests of the Násik, Igatpuri, Sinnar, Niphád and Nándgaon ranges have been parcelled out into forest blocks, and 34 compartments were laid out on the ground in 34 of the blocks, one in each, and some of these compartments have been converted into coupes, and have undergone exploitation. Maps of the blocks in the Nándgaon Range, with few exceptions, have been prepared by the Forest Survey; and those for Násik, Igatpuri, Sinnar, Málegaon and Dindori are in the course of preparation from the Revenue Survey maps; while the maps of the Niphád Range have been completed.

45. In the Ahmednagar Division the teak (Tectona grandis) forests of the Akola and Sangamner ranges were worked, as usual, in accordance with the scheme prepared by Mr. Hight several years ago; and a working plan, based on area, providing for a rotation of 40 years has been applied to 37 bábul reserves situated on the banks of large rivers and streams. Compartments have been made into coupes, and the timber to be removed has been felled and taken out, and some of the exploited coupes have been sown up and enclosed after the ground had been prepared for the reception of seeds.

46. A considerable portion of the forest area of the Poona Division has been differentiated on the maps into forest blocks; and during the year, 50 blocks were formed as under :—

Range.	No. of blocks.
Junnar...	17
A'mbegaon	10
Khed	7
Haveli...	6
Mával	5
Bhimthadi	5
Total ...	50

All these blocks have also been divided into 40 compartments; and 26 compartments in all the above ranges, except Bhimthadi, have been marked out on the ground for conversion into coupes for the timber operations of the ensuing season.

47. No working plans have been applied up to date to the forests in the Sátára Division; but the Divisional Forest Officer, Mr. Fagan, has drawn up provisional plans for the working of the whole of the teak region, except in the Pátan Range, on a rotation of 40 years, and the first experimental coupes in Jávli, Karád, Khandála, Khatáv, Koregaon, Sátára and Wái Ranges have been marked on the ground.

48. In the Sholápur Division provisional working plans for the exploitation of the bábul reserves, situated on the banks of streams and rivers, have been drawn up, and 10 coupes, aggregating an area of 277 acres, in the ranges of Sholápur, Mádha and Pandharpur have been sold for the exploitation of timber and firewood at the cost of the purchasers.

49. The laying out of forest blocks, and of the component compartments of forest blocks, upon the ground is retarded for the want of subordinates qualified in surveying to carry on this work in all divisions and in all ranges of every division. The forest areas are very wide-stretching and scattered, and the work of parcelling them all out into blocks and compartments, and of demarcating the boundaries upon the ground of the blocks and compartments, is herculean, and unless a large staff of surveyors is specially organized to undertake it in every division, the work must necessarily be of very slow progress. At best, only one compartment to become a coupe for the exploitation of timber and other forest produce from it, can be demarcated annually by the Range Forest Officers, and the one divisional surveyor, in the more accessible forest blocks of some of the ranges in a division; and the work is also to a certain extent hung up, while the forest areas are in a state of transition, under settlement inquiries, and sorting into classes.

Then, again, specially trained subordinates are required, in greater numbers than are at present available, in order to be able to prepare all the annual compartments of a division to become coupes. An ordinary forest guard, who has received no professional education, and whose natural intelligence is not of a high class, is not able to make a good selection of the trees in a compartment which are required to be reserved to live through another rotation, to select correctly the trees to be felled, and to make an enumeration, classification, contents calculation and valuation of the latter, and as the success of the working plans of forests of the Deccan depends greatly upon the way the sylvicultural rules drafted to regulate heavy improvement fellings are applied to the compartments in their conversion into coupes, it is necessary that the work should be entrusted to men who are capable of performing it satisfactorily.

(*b*). Annual Plans of Operations.

50. The annual plans of operations were, as usual, drawn up and submitted after the total figures of the sanctioned Budget Estimates of the year had been communicated, and they provided, among other operations, for the exploitation of timber and firewood by departmental fellings as well as by purchasers and

consumers, the departmental collection of the hirda (nut of Terminalia chebula), collection of shikakai (Acacia concinna) by purchasers, supply of bamboos on the permit system, &c. The demand for grass and grazing was met by sales of valuable kurans, or special grass reserves, and of grass on permits. Grazing to agricultural and other cattle was furnished in open forests on free and fee permits in accordance with the orders of Government on the point. The Bhil privilege-holders in the two divisions of Khándesh cut wood and bamboos, and remove them together with other forest produce from the Sátpuda forests, in the exercise of their conceded privileges; and local demands were thereby satisfied.

II.—WORKING OF THE YEAR.

(*a*). Communications and Buildings.

51. The Divisional Forest Officer, West Khándesh, spent a small sum of Rs. 6-12-0 in repairing the Kalambari forest road in the Pimpalner Range. Beyond this nothing has been done by this Department in connection with the construction of roads.

52. The following is a brief account of the new works and repairs to existing roads, &c., undertaken during the year by the Public Works Department at the cost of the Provincial Service Budget, the original projects having been started either at the suggestion of, or with the concurring opinion of the Forest Department.

The Executive Engineer, Khándesh Division, has made a commencement of the road from Warsa to Waghai. This road is designed with the object of connecting the minor States in the Dángs with Násik and Khándesh, and of facilitating the traffic of the timber coming down from the Dángs forests. The actual work done during the season from January to June, when work is possible in such an unhealthy and malarious part of the Dángs, is about 1½ miles, and the expenditure incurred is Rs. 5,164-10-2.

The Haste-Barke road in the Peint Táluka of the Násik Division has been finished, except the surfacing, to three miles, and was extensively used during the year for timber traffic.

In the Ahmednagar Division, two roads—one from Randha to Sarmad and the other from Jámgaon to Kotul—were in progress during the year. Two unfinished slab drains on the first were commenced and nearly completed, while on the second road three masonry culverts have been constructed.

No new roads were undertaken during the year in the Poona Division, but the Ghoda-A'mbegaon road, the work of which was started in 1888-89, was completed during the year 1892-93 at a cost of Rs. 52,402.

53. A detailed account of the works undertaken during the year at the cost of the Provincial Service Budget, by the Public Works Department, at the instance of, and under sanctions given by, the Conservator of Forests, from the discretionary grant of Rs. 2,000 which has been sanctioned in Government Resolution No. 183 A.—622, dated 18th April 1892, Public Works Department, is exhibited in the following statement:—

No.	Executive Officer.	Nature and Locality of Work.	Amount sanctioned.
			Rs.
1	Executive Engineer, Násik ...	Providing planked shutters to three glazed windows to the Range Forest Office at Nándgaon	22
2	Do. do. ...	Extending the godown of cook-room of the Divisional Forest Officer's bungalow	274
3	Do. do. ...	Providing a coach-house to the Divisional Forest Officer's bungalow	184
4	Do. Poona ...	Improvements to the Range Forest Office at Indápur	91
5	Executive Engineer, Sátára ...	Making roof of the Range Forest Office, Pátan, water-tight, and for providing a door	46
6	Do. Khándesh ...	Stone paving to the Range Forest Office, Bhusával	60

No.	Executive Officer.	Nature and Locality of Work.	Amount sanctioned.
			Rs.
7	Executive Engineer, Khándesh ...	Concrete floor to the store-room, &c., of Range Forest Office, Sindkheda ...	38
8	Do. Násik ...	Providing iron barred frames to the windows of the Divisional Forest Officer's bungalow	30
9	Do. Poona ...	Fixing a small gate in the verandah of the Range Forest Office at Vadgaon ...	19
10	Do. Sátára ...	Providing two new windows to the Office of the Divisional Forest Officer, New Adálat Váda	63
11	Do. Ahmednagar	For paving the floor of the Hirda Depôt at Koltembhe	190
12	Do. do.	Do. do. at Tale ...	190
13	Do. do.	Do. do. at Shirpunje	190
14	Do. Khándesh.	Substituting a teak board window in place of a glass one to the Range Forest Office at Navápur	7
		Total ...Rs.	1,404

54. The following additional works were constructed by the Public Works Department during the year at the cost of the Provincial Service Budget :—

A forest depôt house on a sanctioned plan and estimate has been constructed at Karanjali, in the Nasik Division, at a cost of Rs. 1,515.

The construction of the Range Forest Office at Vadgaon in the Poona Division, which was commenced in 1891-92, was completed during the year by the Executive Engineer, Poona, and a record room for the Divisional Forest Officer, Poona, was built in the Haveli Mamlatdár's kacheri.

The Executive Engineer, Satara, constructed stabling for two horses near the forest bungalow at Lingmala at a cost of Rs. 339, which amount was transferred to the Provincial Service Budget from the Forest Budget under the orders of Government.

55. The following table gives the expenditure incurred by the Divisional Forest Officers in building rest-houses, temporary depôt houses, forest guards' huts, *mandows* or sheds for temporary depôt establishments, &c. :—

No.	Division.	Amount.
		Rs. a. p.
1	East Khándesh	392 8 0
2	West Khándesh	1,559 14 5
3	Násik	125 8 0
4	Ahmednagar	.....
5	Poona	20 0 0
6	Sátára	98 0 3
7	Sholápur	2 8 0
	Total ...	2,198 6 8

(*b*). Protection of Forests from Injury.

(*1*). *General Protection and Breaches of Forest Law.*

56. 85 cases in respect of which complaints had been laid before Magistrates against forest offenders by Forest Officers were awaiting trial at the opening of the year ; and 1,439 new cases were sent up to the Criminal Courts during the fifteen months, making 1,524 cases on the registers. Out of these, 1,402 cases were disposed of during the year, with the result that convictions were obtained in 1,009 cases, and 393 cases were acquitted ; 2,436 persons were convicted and punished, and 1,267 persons escaped under the 393 acquitted cases. At the close of the year, 122 cases were pending.

57. A comparison between the number of cases tried by Magistrates for breaches of the forest law during the year under report and the year preceding, with the results of trials, is given in the following table :—

No.	Division.	1891-92.		1892-93.		Percentage of Failures.	
		Prosecutions.	Acquittals.	Prosecutions.	Acquittals.	1891-92.	1892-93.
1	East Khándesh ...	44	8	71	15	18·1	21·1
2	West Khándesh ...	76	18	80	13	23·6	16·2
3	Násik ...	118	18	136	42	15·2	30·0
4	Ahmednagar	166	36	188	37	21·6	19·6
5	Poona	241	58	618	201	24·0	32·5
6	Sátára	105	27	206	60	25·7	29·1
7	Sholápur	176	55	103	25	31·2	24·2
	Total ...	926	220	1,402	393	23·7	28·0

58. As the above figures under 1892-93 cover a period of fifteen months, the following statement, which furnishes the figures from 1st April 1892 to 31st March 1893, and consequently gives a comparison for an equal period of time to that of 1891-92, *viz.* twelve months, is entered :—

No.	Division.	1891-92.		1892-93.		Percentage of Failures.	
		Prosecutions.	Acquittals.	Prosecutions.	Acquittals.	1891-92.	1892-93.
1	East Khándesh ...	44	8	52	11	18·1	21·1
2	West Khándesh ...	76	18	58	9	23·6	15·5
3	Násik	118	18	127	40	15·2	23·6
4	Ahmednagar	166	36	165	31	21·6	18·7
6	Poona	241	58	543	172	24·0	31·6
6	Sátára	105	27	142	45	25·7	31·6
7	Sholápur	176	55	90	22	31·2	24·4
	Total ...	926	220	1,177	330	23·7	28·0

In the East Khándesh Division the number of prosecutions has risen by 8 only, and the percentage of failures has also risen from 18·1 to 21·1. The cause of the increase is that several cases of evasion of payment of duty on foreign timber imported into Khándesh were successfully prosecuted this year, while in the preceding year they had been disposed of under Section 67 of the Forest Act. The reason for the rise in the percentage of failures * * * is ascribed to the prosecution witnesses, who had previously made statements incriminating the accused, retracting when examined before Magistrates.

There is a decrease in the number of prosecutions in the West Khándesh Division for the twelve months; and the percentage of failures has fallen from 23·6 to 15·5.

In the Násik Division the number of new cases in twelve months has risen from 118 to 127, and the percentage of failures is 8·4 greater than that of the preceding year. Of the 42 cases acquitted during the forest year, 34 were dismissed for want of sufficient proof, 7 as trivial, and 1 case, in which the offenders were charged for cutting bábul firewood in the forests of Belgaon Dhága of the Násik Range, where there was unauthorized cutting of over 250 bábul and other trees, was dismissed, for the reason that the Magistrate held that under the Act No. V of 1890 to amend the Indian Forest Act, 1878, "Firewood" is not included in the definition of either "Timber" or "Forest Produce."

There is a decrease in the number of prosecutions undertaken during the first twelve months in the Ahmednagar Division; and the percentage of failures has gone down from 21·6 to 18·7.

In the Poona Division, 549 new cases were sent for prosecution up to the 31st March 1893, or more than double the number of the preceding twelve months; and the cause for this is explained to be the orders contained in paragraph 6 of Government Resolution No. 8626, dated 30th November 1892, in the Revenue Department, according to which 321 cases under Section 25 (*d*) of the Forest Act, "any person who trespasses or pastures cattle or permits cattle to trespass," were, instead of being compounded as heretofore under Section 67 of the Forest Act, required to be sent up to the Magistrates.

The percentage of failures has risen from 24·0 to 31·6, and the Divisional Forest Officer, Mr. Wilkins, states that this increase is due to the erroneous interpretation given by the Subordinate Magistrates to paragraph 3 of Government Resolution No. 7907, dated 6th October 1892, in the matter of the treatment of "trivial offences." A large number of cases of deliberate and wilful infraction of the forest law, sent up by the Divisional Forest Officers for trial, was let off by the Magistrates, because the "damage" had been assessed by prejudiced and interested village panchas at ridiculously low amounts, which had as little bearing on the gravity of the offence, seeing that it was malicious and intentional crime, as was its pretence to represent the real amount of injury done to forestry.

The most serious offences that occurred were in the villages of Nigdalé, Kondwal and Terungan on the ghâts in the A'mbegaon Range, where, during the months of April, May and June 1892, very extensive tracts of evergreen forests covering an area of between 500 to 900 acres were cut down and burnt by certain villagers for dalhi cultivation. The true facts of the destruction done to the Government forests were suppressed by both the forest subordinates and local village officers, and reports made to the Divisional Forest Officer stated that a few loads of ráb of small value had been cut, with the result that the offenders got off in some cases with petty fines inflicted by the local Magistrate, and in others by offering small sums by way of compensation for their offence to the Divisional Forest Officer under Section 67 of the Forest Act. The true state of affairs was brought to light through anonymous petition, which raised suspicion, and led the Divisional Forest Officer, and the Conservator, to visit the scene of destruction. The conduct of the forest subordinates concerned has been considered departmentally, and the case was reported fully to the Collector for disposal by him, and it was under that officer's consideration when the year closed.

The next serious case worthy of mention was the cutting and removal of 425 teak and 366 junglewood trees in the forest of Kikwi in the Purandhar Range. No report of this theft was made by the local forest subordinates, but the Range Forest Officer came to hear of it, and instituted inquiries with the help of the Mámlatdár, Mr. R. K. Sháháne, and the Police, and in the prosecutions that followed succeeded in securing convictions in 18 out of the 29 cases that were tried. The round guard and one beat guard were reduced, and one beat guard was dismissed.

A third case of importance was in the Haveli Range, where the Pátil of Nande cut 120 teak rafters in the forest of that village, and on being prosecuted was fined Rs. 100 *plus* Rs. 50 damages, or, in default, one month's rigorous imprisonment.

The cases prosecuted in the course of the first twelve months of the forest year in the Sátára Division exceeded by 37 the number of the year before, and the percentage of failures shows a slight increase. The Divisional Forest Officer complains that some of the Subordinate Magistrates deal out very lenient law to the offenders, and dismiss them on the grounds that "the offences were not intentionally committed, and the accused had no intention of setting the forest on fire when he was smoking in the forest, and therefore is not guilty;" and in cases in which men of position, such as pátils, &c., are accused, they are dismissed, on the plea that they are not the sort of men to trespass cattle. It is no wonder, then, that cases which are fully scrutinized by the Divisional Forest Officer before

they are sent for trial, should go to increase the percentage of failures, for the Forest Act does not recognize intention, and the Divisional Forest Officer in his treatment of forest offences is guided by the Forest Act, while the Subordinate Magistrates ignore the forest law on the point, and require "intention" to be proved.

In the Sholápur Division there is a very marked decrease in forest crime for which no explanation is given: in twelve months the number of cases prosecuted before the Magistrates went down to 90, and in fifteen months to 103 from 176 in 1891-92. The people of the district cannot have learnt so suddenly to keep their hands from picking and stealing timber and other forest produce, the property of Government; and also to give up their habits of trespassing and illicitly pasturing their cattle within reserved forests. It is much more likely that the Divisional Forest Officer has refrained from prosecuting a number of offences of a certain class, on the grounds of their "triviality" in the light of the value of damage done to the forest, or of the value of the timber or other forest produce stolen, in the estimation of a panch or committee of villagers, which class of offences used previously to be sent up before the Magistrates for trial.

59. The following statement gives a classification of the cases disposed of during the forest year:—

No.	Division.	Offences relating to the misappropriation of				Total.
		(a) Timber.	(b) Firewood.	(c) Other Minor Produce.	(d) Other Offences.	
1	East Khándesh ...	14	17	...	40	71
2	West Khándesh ...	24	20	...	36	80
3	Násik	53	...	1	82	136
4	Ahmednagar ...	7	21	3	157	188
5	Poona	71	102	8	437	618
6	Sátára	39	16	43	108	206
7	Sholápur	1	5	1	96	103
	Total ...	209	181	56	956	1,402

60. The classification of the cases compounded under Section 67 of the Forest Act during the year is given below, as desired in Government Resolution No. 7232, dated 12th September 1892, in the Revenue Department:—

No.	Division.	Offences relating to the misappropriation of				Total.
		(a) Timber.	(b) Firewood.	(c) Other Minor Produce.	(d) Other Offences.	
1	East Khándesh ...	3	212	7	444	666
2	West Khándesh ...	55	58	36	426	575
3	Násik	505	...	1	557	1,063
4	Ahmednagar	4	131	1	2,624	2,760
5	Poona	90	366	15	1,806	2,277
6	Sátára	173	121	74	373	741
7	Sholápur	...	37	13	1,515	1,565
	Total ...	830	925	147	7,745	9,647

61. An account of cases prosecuted and of cases compounded by Divisional Forest Officers under Section 67 of the Forest Act, during the year of the report,

is given in the subjoined statement, as directed in Government Resolution No. 3527 of 2nd May 1884, in the Revenue Department:—

No.	Division,	Taken into Court.		Compounded under Section 67 of the Forest Act.		Total Number of Cases.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Khándesh ...	44	71	1,570	666	1,614	737
2	West Khándesh ...	76	80	1,248	575	1,324	655
3	Násik	118	136	1,472	1,063	1,590	1,199
4	Ahmednagar	166	188	2,941	2,760	3,107	2,948
5	Poona	241	618	2,063	2,277	2,304	2,895
6	Sátára	105	206	923	741	1,028	947
7	Sholápur	176	103	1,608	1,565	1,784	1,663
	Total ...	926	1,402	11,825	9,647	12,751	11,049

62. And a comparison of compounded cases and of the sums of money accepted by way of compensation for the forest offences over the two corresponding periods of twelve months each, is presented in the following table:—

No.	Division.	1891-92.		1892-93. 1st April 1892 to 31st March 1893.	
		Cases compounded.	Amount of compensation.	Cases compounded.	Amount of compensation.
			Rs.		Rs.
1	East Khándesh	1,570	5,717	634	2,273
2	West Khándesh	1,248	5,720	575	2,493
3	Násik	962	4,828	1,056	6,416
4	Ahmednagar	2,941	5,291	2,275	4,510
5	Poona	2,061	3,858	2,210	7,756
6	Sátára	923	1,688	542	899
7	Sholápur	1,608	2,165	1,305	1,754
	Total ...	11,313	29,267	8,597	26,101

63. The total of the sums which were accepted under Section 67 of the Forest Act, in the several divisions of the Central Circle, during the forest year, by way of compensation for forest offences, is given in the following statement, as ordered in Government Resolution No. 8738, dated 24th December 1887, in the Revenue Department. The amounts were credited without any deduction in respect of any rewards which may have been given to persons who may have contributed to the detection of the offenders, under Receipts V (*c*), in accordance with the system of classification of forest accounts prescribed in the list published with Government Resolution, in the Revenue Department, No. 2420, dated 8th April 1891 :—

No.	Division.	Amount.
		Rs.
1	East Khándesh	2,300
2	West Khándesh	2,493
3	Násik	6,275
4	Ahmednagar	4,816
5	Poona	8,044
6	Sátára	1,254
7	Sholápur	1,837
	Total ...	27,019

64. The following statement shows the number of compounded cases, in connection with which rewards were paid to the persons who had contributed to the detection of the cases, together with the amounts of the rewards thus paid, under the orders of Government Resolution No. 8568, dated 16th December 1887, in the Revenue Department :—

No.	Division.	Number of compounded cases.	Rewards amounting to											Amount	Remarks.
			Re. 1.	Rs. 2.	Rs. 3.	Rs. 4.	Rs. 5.	Rs. 6.	Rs. 7.	Rs. 8.	Rs. 9.	Rs. 10.	Above Rs. 10.		
														Rs.	
1	East Khándesh... ...	56	14	16	10	2	11	...	1	...	...	1	1*	171	*Actually paid, Rs. 18.
2	West Khándesh ...	2	...	1	...	...	...	...	...	...	...	1	...	12	
3	Násik	188	93	42	19	11	13	5	1	1	1	...	2†	343	†Below Rs. 15.
4	Ahmednagar	1	...	...	...	...	...	...	...	...	...	...	1	20	
5	Poona	271	161	59	8	6	9	5	...	1	...	2	...	402	
6	Sátára	493	435	47	8	2	...	1	...	...	...	...	...	261	
7	Sholápur...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Total ...	1,011	723	165	45	21	33	11	2	2	1	4	4	1,209	

It will be perceived that out of a total number of 9,647 cases compounded with a total sum of Rs. 27,019, rewards amounting to Rs. 1,209 have been paid in 1,011 cases. The cost of rewards is charged in the forest accounts to A. IX (*c*) against Budget provision.

65. As directed in paragraph 11 of Government Resolution No. 1899, dated 13th March 1891, a statement showing the number of cases sent up to the Divisional Forest Officers for consideration under Section 67 of the Forest Act, and their subsequent disposal, is given below :—

No.	Division.	Number of cases sent up to Divisional Forest Officers for consideration under Section 67 of the Forest Act.	Number of cases disposed of under Section 67 by acceptance of compensation.	Number of cases not entertained, but let off with a warning.	Number of appeals against the proceedings.	Manner in which appeals have been disposed of.	Remarks.
1	2	3	4	5	6	7	8
1	East Khándesh ...	707	666	41	.....	.....	
2	West Khándesh ...	575	575	.....	.....	.....	
3	Násik...	1,592	1,063	529	.....	.....	
4	Ahmednagar... ...	2,760	2,760	.....	.....	.....	
5	Poona	3,124	2,277	847	.....	.....	
6	Sátára	741	741	.....	.....	.....	
7	Sholápur	1,565	1,565	.....	.....	.....	
	Total ...	11,064	9,647	1,417	.....	.....	

66. The classification of the sums of money accepted under Section 67, in amounts of rupee one and upwards to the maximum permitted by the law, is, as directed in Government Resolution No. 1899 of 13th March 1891, in the Revenue Department, given in the following statement:—

No.	Division.	Number of cases in which compensation was fixed at rupees																							
		1 and under.	2 "	3 "	4 "	5 "	6 "	7 "	8 "	9 "	10 "	11 "	12 "	13 "	14 "	15 "	16 "	17 "	18 "	19 "	20 "	21 "	22 "	23 "	24 "	25 "
1	East Khándesh..	351	88	45	40	33	20	7	9	4	12	6	7	6	3	4	3	1	3	1	..	2	1	1	1	4
2	West Khándesh..	239	99	57	27	29	16	10	11	10	18	4	8	7	2	5	4	..	5	1	2	2	1	..	..	2
3	Násik	216	171	111	100	75	71	62	34	31	38	2	28	5	9	23	2	5	2	2	29	3	..	..	3	12
4	Ahmednagar ..	1,543	546	254	123	114	53	34	24	16	14	7	3	5	3	3	2	..	2	3	1	1	2	..	1	2
5	Poona	818	466	249	171	165	85	68	52	16	53	18	34	11	9	4	17	2	8	3	3	3	6	3	..	3
6	Sátára	391	157	69	47	28	17	8	5	3	3	6	1	1	1	2	..	..	..	..	1	..	..	..	..	..
7	Sholápur	1,135	272	74	29	22	7	8	6	5	2	..	..	1	..	2	..	..	1	..	..	..	..	..	..	..
	Total ..	4,693	1,799	859	537	466	269	197	141	85	140	43	81	36	27	43	28	8	21	10	36	11	10	4	5	23

No.	Division.	Number of cases in which compensation was fixed at rupees																										Total.
		26 and under.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
1	East Khándesh..	2	2	..	..	..	..	1	..	..	1	1	..	..	1	..	1	2	..	..	..	..	..	..	..	3		666
2	West Khándesh..	1	1	..	..	..	2	..	..	1	1	..	1	..	1	..	..	..	..	..	..	..	1	..	..	7		675
3	Násik	..	1	3	..	10	1	..	..	1	1	4	..	..	..	6	1	..	..	..	..	..	..	..	1	..		1,063
4	Ahmednagar ..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..		2,760
5	Poona	3	1	1	..	2	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..		2,277
6	Sátára	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		741
7	Sholápur.. ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..		1,565
	Total ..	6	5	5	1	13	3	2	1	2	4	6	1	1	2	7	2	2	...	..	..	..	1	..	1	10		9,547

The very large falling of, *viz.* 57 per cent., in the number of cases dealt with under Section 67 of the Forest Act, in the East Khándesh Division, during the twelve months 1st April 1892 to 31st March 1893, compared with the twelve months preceding, is to be accounted for by offences of illicit grazing not being treated, as before, under Section 67, subsequent to the issue of Government Resolution No. 8626, dated 3rd November 1892: and some cases of breach of the rules published under Section 41 of the Forest Act were let off with a warning instead of being disposed of under Section 67.

In the West Khándesh, Násik, and Poona divisions no case was compounded under Section 67 after the receipt, by the Divisional Forest Officer, of Government Resolution No. 7907, dated 6th October 1892. And in the other divisions, Sátára and Sholápur, very few cases were disposed of under this provision of the forest law after November 1892.

67. The District Magistrate of Poona has issued circular instruction to his subordinate Magistrates to decline to issue process if there has been inordinate delay in bringing complaints before them in connection with forest offences, and has told them that a delay of over six weeks from the date of the offence should ordinarily be considered "inordinate delay;" at the same time he has specially warned them that when from the papers the delay seems to be satisfactorily accounted for, they are not to hesitate to issue process. A period of limitation cannot, it would seem, be prescribed legally, and a Magistrate could not well refuse to take up a complaint on such grounds. But the order has undoubtedly worked beneficially in the Poona District, for it has stirred up the forest subordinates to be more prompt and punctual in treatment of forest crime and to avoid procrastinating and vexatious delays, which undoubtedly contribute to the failure of prosecutions, by giving time to the accused persons to square hostile witnesses, and by making such ancient history of the offence, that the witnesses, who mostly belong to the uneducated classes, forget the facts, and under cross-examination by astute vakils come hopelessly to grief over salient points in the prosecution evidence.

68. Every forest offence is required to be reported to the Divisional Forest Officer by the Range Forest Officer, and the order in writing of the former has to be obtained before a prosecution can be instituted; and this precaution is of itself productive of delay in lodging complaints. At the same time it gives time for the accused persons to get at the prosecution witnesses; and it is undoubtedly one of the chief reasons for a considerable percentage of acquittals in prosecuted cases, for the witnesses who have deposed against the accused when the preliminary inquiries were made, turn round and tell a different tale when placed in the witness box before the trying Magistrate. However, notwithstanding these disadvantages, the precaution is judicious, and works beneficially on the whole; but it should be taken into consideration when a Forest Officer is being judged as to his treatment of forest offences by the percentage of acquittals of cases prosecuted in his division.

(2). *Protection from fire.*

69. The following statement gives the results of fire conservancy in the several divisions of the Central Circle during the forest year, as compared with

those of the preceding year of twelve months, and it should be remembered that two hot seasons or periods of dry months are included in the forest year when the forests are more especially liable to be fired:—

No.	Division.	Forest area placed under protection against fire.		Acreage burned.		Percentage burned.		Expenditure incurred in rupees.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Khándesh	510,796	516,315	33,766	48,788	6·6	9·4	176	281
2	West Khándesh	1,088,625	1,076,136	639,312	288,000	58·7	26·7	226	904
3	Násik	818,499	818,887	11,321	7,870	1·3	0·9	128	166
4	Ahmednagar	541,524	541,814	374	2,898	0·06	0·5	...	...
5	Poona	476,645	476,169	3,805	6,300	0·79	1·3	11	8
6	Sátára	438,684	444,844	993	2,057	0·22	0·4	...	6
7	Sholápur	177,716	178,035	222	860	0·12	0·4	...	...
	Total ...	4,052,489	4,052,200	689,793	356,773	17·02	8·8	541	1,365

70. It will be perceived that there was a marked improvement during the forest year notwithstanding the disadvantages mentioned above. But the year has been a favourable one for fire conservancy, as storms of rain occurred frequently in different parts of the Deccan between November 1892 and June 1893, and the grass and inflammable undergrowth was often wetted and naturally protected against consumption by fire. No special measures beyond the burning, by forest guards with the help of hired labour here and there, of fire-paths on the sides of high roads, cart-tracks and foot-paths and outer boundary lines of reserved forest and surrounding camping grounds, &c., were adopted in any of the divisions of the Central Circle, except in the two divisions of Khándesh, where, in addition to these ordinary precautions, internal fire-lines were burnt across the more extensive forests in the Sátpudás and elsewhere, at intervals of about 1,000 feet. The system of reporting, by means of a post card, to the Collector, immediately on the occurrence of a fire in any forest, has been introduced in all the divisions of the Central Circle, as directed in Government Resolution No. 757, dated 27th January 1893, in the Revenue Department.

71. In the East Khándesh Division 49 fires occurred, and 48 of these burnt only 9,788 acres of reserved forest, but one disastrous fire in the Sátpudás traversed no less than 39,000 acres and raised the total area burnt in the division beyond the acreage of the preceding year. This fire originated through careless smoking on the part of three Tádvi Bhils, who had gone into the reserved forests of the Yával Sátpudás to exercise privileges of cutting and removing timber, of which they are in enjoyment as a tribal concession. A gale of wind was blowing at the time, and although upwards of 300 men attacked the fire, it could not be overcome until it had travelled over a wide extent of forest; the fire-paths were of very little impediment to its course. The three men were prosecuted, with the effect that one was convicted and sentenced to rigorous imprisonment for one month and to pay a fine of Rs. 50, and the case against the two was still pending when the year closed. Out of the 48 fire cases of the division the offenders were discovered and prosecuted in 14, with the result that convictions were secured in 8 (one of these got off subsequently on appeal), 2 were acquitted, and 4 were awaiting trial at the end of the year.

72. Fire conservancy in West Khándesh has been very successful. Fire traces of a total length of 1,565 miles were burnt at a cost of Rs. 885, and during the fifteen months 122 fires were reported, and they are estimated to have burnt 288,000 acres against 116 fires of 639,312 acres of the preceding year. In connection with 25 fires, the persons who caused them were discovered; 1 case was compounded and 24 were prosecuted, with the result that 35 men were convicted and punished with fines aggregating Rs. 194 and with rigorous imprisonment of one month and three days in the aggregate. * * *

In reviewing the divisional administration report the Collector has recorded that "the system of internal fire-paths has been a success; for though there were more fires this year than last, the area burnt was not half so much, showing that the fires did not spread as they did last year, and it is the spreading of a fire that the paths are intended to prevent."

73. Fires occurred in all the ranges of the Násik Division, but there has been a great improvement in the vigilance and activity of the forest subordinates, and also of forest villagers, in discovering and attacking them.

74. In the Ahmednagar Division 78 fires were started against 29 of the previous year; and they overran 2,898 acres, or about eight times more space than during the previous year. The damage done to forest property by these fires was estimated at Rs. 169; and in connection with this the Collector of Ahmednagar has recorded: "The Collector had occasion to remark when forwarding certain returns of forest fires that the loss of produce assigned to this cause was out of all proportion small when compared with the estimates of damage done to the same class of produce by trespassing cattle. The object of the forest subordinates in depreciating the former kind of loss, was of course obvious, and the Collector was glad to find that the Conservator caused the correction of this disingenuousness."

75. Fire conservancy in the Poona Division has not been so satisfactory as could be desired, the area traversed having been 2,495 acres greater than that of the previous year. The fires have chiefly taken place in the ghát tálukas; and in the majority of cases have been due to carelessness and negligence in ráb-burning, the villagers taking no reasonable precautions to prevent fire spreading from their fields to the adjoining forests. Several cases in which carelessness and negligence in ráb-burning were traced to the offenders, were sent up for trial, but the Magistrates refused to convict, on the ground that no rules have been passed under Section 25 (*b*) of the Forest Act as amended. * * *

The most important case of firing the forest occurred in the Khed Range, where one Bálárám Bhaurám, an agent of the Commissariat hay contractor, was apprehended in the act of firing the grass in the Kohinde Budruk reserved forest, on or about the 8th of May 1893, in order to conceal malpractices in connection with the exploitation of grass, and he was sent up for trial before the 2nd Class Magistrate of Khed, who convicted and sentenced the accused to six months' rigorous imprisonment, and a fine of Rs. 100. On appeal, however, to the Sub-divisional Magistrate, the case was committed to the Sessions, where, unfortunately, the accused was acquitted.

76. In the Sátára Division an area of a little more than 3 square miles was burnt by 97 fires, of which the Jávli Range had 20, Mahábaleshvar 16, Pátan 15, Shirála 6 and Wái 5; thus 62 fires broke out in the ghát ranges and the remainder in the eastern ranges. The forest subordinates were very watchful and active; for in 41 out of the 97 fires the incendiary was caught: of these 9 were let off with a warning, as boys were the culprits: in the other 32 cases prosecutions were ordered, and at the end of the season 13 convictions and only 1 acquittal had been recorded. 18 cases remained awaiting trial.

77. A little more than a square mile was burnt in the Sholápur Division; and the cause of the fires is attributed to careless smoking by persons passing through reserved forests, or to sparks from passing railway engines.

78. The entire area in charge of the Forest Department, whether it be legally constituted reserved forest, or protected forest, or provisionally notified forest lands, is brought under fire-protection directly it is placed in the care of the forest subordinates.

(*3*). *Regulation of Grazing and Protection from Cattle.*

79. Grazing is regulated under the rules passed by Government in their Resolution No. 3595 of 23rd May 1890; and for this purpose portions of forest areas are kept open during a part of the year, and are available to all local cattle, including agricultural cattle and other privileged cattle which are permitted to graze in such portions, some free of charge, some on payment of fees on the permit system. Cattle from outside the district also are admitted to graze on higher rates of fees if the forests can support them. In addition thereto, some "valuable kurans," fodder reserves, the tree growth in which has attained a

sufficient height to be beyond the risk of damage by cattle, are also sold by auction for grazing, for a defined period generally, after the grass crop has been cut by hand and removed.

From the 16th August of one year to the 31st March of the next is generally considered to be the grazing season; and from the 1st April to the 15th August, the close season against grazing, in respect of grazing areas in the forests of the Deccan, with the exception of the Khándesh Divisions, where the close period extends from 1st February to 31st May. Sheep and goats are not allowed to graze over a greater portion of the area open to grazing: and goats are only allowed where sheep are permitted, and then in the proportion of 1 goat to every 50 sheep.

80. The following statement shows the distribution of the areas between closed and open to grazing in the several divisions of the Central Circle, in round numbers :—

No.	Division.	Area open to grazing.	Area closed to grazing.	Total.	Remarks.
		Sq. m.	Sq. m.	Sq. m.	
1	East Khándesh	736	60	796	
2	West Khándesh	916	365	1,281	
3	Násik	811	468	1,279	
4	Ahmednagar	477	369	846	
5	Poona	344	397	741	
6	Sátára	512	181	693	
7	Sholápur	96	182	278	
	Total ...	3,892	2,022	5,914	

81. The following statement shows the number of cattle of different kinds impounded in the several divisions of the Central Circle during the year, under Section 69 of the Indian Forest Act, for trespassing in closed forest reservations and those impounded for grazing in open areas without passes :—

No.	Division.	Kind of area.	Cows and Bullocks.	Buffaloes.	Camels.	Horses.	Asses.	Sheep.	Goats.	Total from, Closed area.	Total from, Open area.
1	East Khándesh	Closed ...	6,777	1,424	...	35	...	318	704	9,258	...
		Open ...	3,672	1,024	...	85	14	87	3,313	...	8,195
2	West Khándesh	Closed ...	9,381	1,562	...	71	...	2,384	2,404	15,802	...
		Open ...	4,795	738	...	47	2	36	888	...	6,506
3	Násik	Closed ...	15,853	1,112	...	184	24	19,274	5,550	41,997	...
		Open ...	5,813	347	...	68	16	10,739	4,842	...	21,825
4	Ahmednagar	Closed ...	38,224	2,695	3	372	59	18,865	14,357	74,575	...
		Open ...	15,461	1,163	...	82	100	19,572	14,701	...	51,079
5	Poona...	Closed ...	14,502	1,563	4	192	68	12,643	7,593	36,565	...
		Open ...	6,458	1,022	...	103	22	9,170	7,813	...	24,588
6	Sátára	Closed ...	13,709	1,428	...	122	44	12,538	2,877	30,718	...
		Open ...	4,996	584	...	20	18	9,032	2,626	...	17,276
7	Sholápur	Closed ...	22,154	1,671	...	95	25	4,487	2,771	31,203	...
		Open ...	7,120	656	...	44	49	3,019	1,974	...	11,862
	Total ...	Closed ...	120,600	11,455	7	1,071	220	70,529	36,256	240,128	...
		Open ...	48,315	5,534	...	449	221	51,655	36,157	...	142,331

82. The East Khándesh Division records a decrease of 54 per cent. in the number of impoundings during the period of 12 months corresponding to the year 1891-92, while extensive seizures of cattle illicitly grazing in 'closed forest,' as well as 'open forest,' were made, and were severely dealt with under Section 67 of the Forest Act; the result being that the people have learnt to refrain from trespassing their cattle in closed forests, and to take out grazing permits for open forests. The nomadic graziers,—Thelaris who used to sweep over the Khándesh district with their large herds, driving their animals into all and any forest areas, without waiting to take permits and obtain a right of entry, and with an utter disregard of rules and regulations, and of the differentiation of closed and open forest,—have

learnt the wisdom of paying their fees beforehand, and taking out the necessary permits, whereby they secure grazing for their animals throughout the grazing season, instead of paying in pound fees and other penalties, in a single day, more than the season's permit fee for a brief spell of stolen grazing. The Collector has remarked: "In this division, as in the other, it is pleasant to find a large reduction in the number of cattle impounded, showing, as it probably does, that the people are getting to observe the rules better."

83. In West Khándesh also there is a steady annual decrease in impoundings: in 1890-91 the number was 45,821; in 1891-92 it fell to 24,500; and in the first twelve months of 1892-93 to 19,220; while between the 1st April and the 30th June 1893 only 3,088 head of cattle had to be sent to the pound.

84. About two-thirds of the total number of cattle impounded in the Násik Division were sheep and goats, the property of foreign graziers: these people establish themselves in foreign territory just beyond the frontier and drive their animals across into reserved forests to graze during the night, and they post scouts to signal the approach of forest guards or forest villagers, when their animals are driven out at once. In one case upwards of 2,500 sheep and goats were caught by forest subordinates and forest villagers grazing in a closed forest, in one night, and were sent to pound: their owners had been warned, frequently, but they maintained stoutly that their animals had not grazed in the reserved forest and did not want to graze there, even when the hoof-beaten track of the sheep and goats leading from their halting place into the forest was pointed out to them, and they were told that the animals had been seen from a distance within the forests: by means of their scouts they managed to evade apprehension, until one night forest guards and British villagers made a long detour through foreign territory, and took the graziers in the rear, catching the whole herd inside the forest, when they were marched off to the village pound. In this way one catch, in one place, in one night, sends up the tale of total impoundings of the year.

85. In the fifteen months of the forest year 1892-93 there has been an increase in the number of impoundings over the record of 1891-92 by 30,581, of which 8,019 were goats and 9,417 were sheep, in the Ahmednagar Division. Nearly 50 per cent. of the animals impounded during the forest year were sheep and goats.

86. In the same way in the Poona Division there has been an increase in the number of impoundings, which has gone up to 61,153, of which more than one-half or 37,219 were sheep and goats. The Divisional Forest Officer had occasion to bring, specially, to the notice of the Collector the goat nuisance, in the Dhond Range, with a view to the pound fees for these animals being raised.

87. In the Sátára Division the number of cattle impounded during the fifteen months totalled 47,794, of which 58 per cent. were sheep and goats.

88. 43,065 head of cattle were impounded during the forest year in the Sholápur Division, of which 31,203 were taken from closed forests: the number of sheep and goats came to 11,251. In 872 cases warnings were given to the owners of cattle for allowing their animals to trespass within forests.

89. As the year under report embraces a period of fifteen months, there appears to be an increase of 49,819 cattle over the figures of the preceding year, but on comparing the figures of the first twelve months, which gives an equal period of time, it will be found that there has been a decrease in the number of cattle impounded by 11,287 on the record of 1891-92. Of the total number impounded, more than half consisted of sheep and goats—122,184 of the former and 72,413 of the latter.

90. In order to keep out cattle from forests under reboisement, such as exploited coupes, plantations, &c., fences of the crown branches of the felled trees, are constructed, and wire-fencing is also erected in specially selected localities, the wire being purchased from either the Telegraph Department or in the local market.

91. The following sums have been spent in the purchase of wire during the year for use in the ensuing year:—

No.	Division.	Quantity of wire.	Amount.
			Rs.
1	East Khándesh	60 cwts. and 6,000 staples.	1,210
2	West Khándesh	.....	...
3	Násik	79 cwts. and 10,000 staples.	1,533
4	Ahmednagar	55 cwts.	950
5	Poona	.....	...
6	Sátára	.....	...
7	Sholápur	187 cwts.	3,028
	Total ...	381 cwts. 16,000 staples.	6,721

The fences previously made were also kept in good order and have proved, it is needless to say, very advantageous.

(*c*). Improvement of Forest Growth.

(1). Natural Reproduction.

92. The year under report was favourable to natural reproduction, owing to a plentiful and seasonable rainfall generally throughout the Central Circle. In the East Khándesh Division it was very refreshing to observe the myriads of young plants of teak and of other kinds of timber trees resulting from self-sown seeds which appeared in suitable soil, on the bank of the Aner river, and in fire-protected areas, in the Sátpuda and other forests. The Anjan (Hardwickia binata), which does not seed annually or regularly, seeded during the year, and has given an abundant supply of young life in the Transpurna, the Ráver, Sávda, Yával and other reserved forests where this valuable tree predominates. The stools of teak trees which were felled in the forests of the Jámner Range and in the Sátpudás have thrown up vigorous shoots with scarcely any failures.

93. In the West Khándesh Division natural reproduction, which is generally much retarded by the fierce and extensive forest fires, which occur annually, has made a better show than usual, owing to the great reduction in the area of forest fires and also owing to more favourable atmospheric conditions.

94. Where fire-protection and closure against cattle have been effective, natural reproduction in the Násik forests is more conspicuous than elsewhere; however, its advance, except in parts greatly exposed to cattle, is generally satisfactory.

95. Mr. Wilkins, Divisional Forest Officer, Poona, reports that natural reproduction is making sure and steady progress all over his forests. Under the shelter of bushes, young plants of all kinds are to be seen, which have come from seeds deposited by birds and four-footed animals. The young fresh growth of nimb (Melia azadirachta) and of sandalwood (Santalum album) also, in places where the seedlings receive protection against cattle, and where they obtain moisture and nourishment and shade, is most marked in the drier and stonier high lands in the eastern ranges of the division; while in the western ranges, and more particularly along the Ghats, the new growth in the moist forests is very promising.

96. In the Sátára Division there is nothing special to record: the forests which do not suffer from cattle are making steady improvement in every way. In order to supplement the work of Nature in scattering seeds, the forest guards of the permanent establishment collected 164 khandis, 26 maunds, 23 pounds of seeds of trees specially valued for timber and fuel, and broad-casted them, during the rains, over 23,022 acres of closed forests.

97. In the Sholápur Division natural reproduction has advanced steadily, grass has increased in density, and self-sown seedlings of nimb and other trees which inhabit this comparatively rainless part of the Deccan, are coming up in fair profusion all over the forests, on uplands as well as on plains.

(2). Artificial Reproduction.

98. In the East Khándesh Division 35 khandis, 14 maunds and 11 seers of seeds collected mostly by forest guards, were sown over 4,550 acres of reserved forests; of which 1,133 acres were in prepared pits, in 573 acres the seeds were dibbled into the ground, 843 acres were ploughed up in the first place, and over the remaining 2,001 acres seeds were broad-casted. Mr. Madan reports that these operations have met with varying success according to soil and situation; in some places, bábul seedlings have appeared in dense masses; in other localities awla (Phylanthus emblica) and tarwad (Cassia auriculata) cover the ground, but the germination of teak (Tectona grandis) has been generally sparse, as it usually takes more time than one rainy season to make its appearance; some slips of Jatropha curcas planted by forest guards have established themselves.

99. In the West Khándesh Division in the two nurseries, one in Dhulia and the other at Dahiwel in the Pimpalner Range, a large number of young plants are raised yearly for transplanting into the neighbouring forests, but the results are inconsiderable. The exploited coupes of the season were sown up. Each forest guard is required to prepare and sow 1,000 pits, and to broad-cast one thousand acres of the forests, within his beat yearly; and where constant attention is given to the young plants, and they are well protected against cattle and fire, a fair measure of success has been obtained.

100. In the Násik Division 616 acres were sown chiefly with bábul seeds in the reserved forests on the plains in the Násik Range. Some portions were pitted over, and others were ploughed. The coupes of the year in the Násik, Igatpuri, Sinnar and Nandgaon ranges have been sown up; in some of them the ground was previously ploughed, and in some the seeds were dibbled, while elsewhere they were broad-casted. Some of the old plantations are flourishing, such for example as Belgaum Dhaga and Pathardi in the Násik Range, Sawandgaon, Dabli, Aghar and Wadner in the Málegaon Range, Pada in the Dindori and Pimpalgaon Mori in the Igatpuri Range: but artificial cultivation generally is not so successful as might be the case if cattle were kept out constantly from the areas which have been specially treated in successive years.

101. In the Ahmednagar Division 191 acres 15 gunthas representing the exploited coupes of the year in the bábul reserved forests were ploughed and sown, principally with imported Sind bábul seed; and as reported by the Range Forest Officers, the results of these sowings are generally satisfactory; many of these forests being situated on the banks of large rivers. Nimb seeds were dibbled into the ground inside bushes over 9,875 acres at intervals of 10 feet in most of the ranges, and the Range Forest Officers report the results to be good: 919 acres were dibbled over with teak seeds at distances of 10 feet apart, in the Shrigonda, Karjat, Shevgaon and Sangamner ranges, but the seeds have not germinated so freely as hoped for. In lands opened to sheep grazing in the Nagar, Párner, Shrigonda, Karjat, Ráhuri and Sangamner ranges, 2,835 acres were dibbled over with tarwad (Cassia auriculata), and seeds of other kinds, the young growth from which sheep religiously avoid, at distances of 10 feet apart; and the results of this operation are said to be fairly successful. In the Nagar, Shrigonda, Karjat, Jámkhed, Shevgaon, Nevása Ráhuri and Kopargaon ranges, 3,433 acres of rich black soil were broad-casted with bábul seed in the established manner, a large handful of seed being scattered at every 4 paces or 10 feet by a gang of labourers moving in a line 10 feet apart from each other; and the Range Forest Officers report that the seeds of the previous year have germinated very freely, while those of the year under report have only come up sparsely at present. 117,643 pits were dug by paid labour in the Nagar, Párner, Shrigonda, Karjat, Shevgaon, Nevása, Ráhuri, Kopargaon, Sangamner and Akola ranges, and nimb (Melia azadirachta), sadara (Terminalia tomentosa), teak (Tectona grandis), &c. were sown in them, and the condition of the seedlings

is good. In 40,159 acres of reserved forests beat guards with their own hands prepared and placed seeds in 120,677 small pits and also in 1,016,876 holes, each just large enough to bury a seed, and in addition to this 15,000 acres were broad-casted by them: 255 khandis of seeds were collected by forest guards within their beats, free of all cost.

The plantations at Dongargan and Hanumantgaon are maintained, and are making good progress; 2 mális on Rs. 6 each are employed to look after them.

102. In the Poona Division reboisement operations by means of dibbling, furrow-ploughing, &c., were undertaken with great vigour, paid labour costing Rs. 3,121 being employed. 135,480 pits were thus dug for the reception of seeds; 864½ acres of lands on the flat were plouged and sown; and 400 acres were sown broad-cast. In addition thereto, 133,950 pits covering an area of about 403 acres were made and sown by forest guards, free of cost, with mixed seeds, and 1,617 acres of land containing bushes were broad-casted in places, and seeds of nimb, mango (Mangifera indica), jambhul (Eugenia jambolana) and of other trees of the arid region, were dibbled into the ground. In every range of the Poona Division, seeds were collected by forest guards free of cost, and the quantities of seeds thus collected are returned at 152 khandis, 15 maunds and 27 pounds.

103. In the Sátára Collectorate operations are confined to,—

1. Nursery and plantation proper.
2. Dibbling, &c., of seed.
3. Broad-casting.

A larger amount has been expended than in the previous year, the chief reason for this being the sowing up of all the exploited coupes of the season, so that these compartments may become hereafter fully stocked with a large proportion of seedling trees. In all the ranges, plantation works were undertaken at the cost of the forest budget, which amounted to Rs. 1,941, and on the whole the year was a favourable one for the growth of vegetation, and it was pleasing to observe a marked improvement in many of the plantations.

104. In the Sholápur Division the measures taken in the matter of re-afforestation, by paid labour, have been that the smaller kinds of seeds have been broad-casted; and the larger kinds, such as ain (Terminalia tomentosa), teak, mango, &c., have been dibbled into the soil over a surface of about 4,500 acres. Beat guards, each of them without any extraneous assistance, have prepared 100 pits for mangoes 2′ × 2′ × 2′, and 2,000 pits 1′ diameter and 1′ deep for other seeds, within the forests in their beats; and the total extent of their cultural works has spread over 165 acres 38 gunthas sown by pitting, 61½ acres sown by dibbling, and nearly 14,857 acres sown broad-cast. Each guard is required to gather and bring in 784 lbs. of mixed seeds during the season; 112 khandis, 26 maunds and 10 seers of seeds were thus collected by forest guards; while 80 khandis, 5 maunds and 11 seers were purchased locally, and 5 khandis, 25 maunds and 5 seers were imported into the division. The Divisional Forest Officer reports the forest guards' cultural work to be promising.

105. The cultural operations undertaken by forest guards, as a part of their ordinary duties, cannot but have a marked effect upon the rewooding of the country within the Central Circle. Each forest beat, and all the forest areas in every division are divided into beats, so that not an acre in charge of the Forest Department is left outside a beat, is an unit of plantations; so that reboisement is pushed yearly in as many different localities spread over the face of the country, as there are forest guards in charge of forest-beats.

(3). Early Thinnings.

106. No such operation has been attempted in any division of the Circle.

(4) *Other Operations for the Improvement of the Growing Stock.*

107. All the forest guards cut creepers within the forests of their beats, and they are required to eradicate all prickly-pear which may freshly appear in their forests.

108. In the East Khándesh Division prickly-pear (Opuntia dillenii) was taken out of forests in the Bhusával and Jalgaon ranges at an expenditure of Rs. 8.

109. In the Násik Division Rs. 57-4-6 was paid for the cutting of creepers in the heavy forests of the Peint Range, about 7,268 acres having been worked over. And the eradication of prickly-pear (Opuntia dillenii) was undertaken in forests of the Kalvan and Niphád ranges, wherein 860 acres were freed of this nuisance, making room for a better growth of timber, at a cost of Rs. 791-10-6.

110. In the Poona Division gangs of 6 or 8 men were working at prickly-pear eradication, each gang under a forest guard; and about 83 acres and 25 gunthas of forest lands, densely covered and shut up by it, were cleared in the Junnar, Indápur, Haveli, Dhond, Purandhar, Sirúr and Bhimthadi ranges. The prickly-pear, after being cut up and rooted out, was buried in natural rifts in the ground, and where these did not occur it was stacked in large heaps 10′ × 10′ × 8′ to decompose, when it was burnt.

111. In the Sátára Division an expenditure of Rs. 132-15-0 was incurred in cutting down and uprooting prickly-pear (Opuntia dillenii) in the Tásgaon Range: but each forest guard with his koita or bill-hook severed creepers, and dug up young prickly-pear in the forest of his beat.

112. In the Sholápur Division, where the prickly-pear (Opuntia dillenii) was too heavy for the forest guards to cope with unaided, hired labour had to be employed in its destruction, and about 480,585 square feet were cut out at a cost of Rs. 784.

113. The account of prickly-pear removal may possibly not come properly under the designation "Other operations for the improvement of the growing stock," and it might seemingly more appropriately be termed an operation to make room for growing stock, but it has been entered here, as no other sub-heading has been provided for it.

114. No girdling-operations have been undertaken in any division of the Circle, either for the improvement of the forests, or to facilitate the removal of timber, or to season it on foot at the risk of heart shakes.

(5). Experiments.

115. Seeds of Terminalia chebula, hirda, the valuable myrobolan of commerce, obtained from the Southern Marátha Country, were sown in the Sátpuda hill forests of Khándesh, where the tree is at present unknown, but there has not been sufficient time for germination, as the seed often remains underground for over twelve months before the young seedlings appear. The tree is common in Central India on the high lands of the Sátpudas, and it ought to do well in the Sátpudas of Khándesh.

116. Seeds of Sind bábul were obtained from the Conservator of Forests, Sind, and were sown in the river-side bábul forests in several divisions of the Deccan; no less than twenty bags were thus sown in the Trans-Purna and other forests in East Khándesh; the tree does remarkably well in the Presidency proper.

117. Seeds of sal, Shorea robusta, which the Conservator of Forests, Central Provinces, Jubbulpur Circle, had kindly supplied, were distributed to all Divisional Forest Officers and were sown in June 1893, in selected forest areas in all divisions; it is reported that they have germinated rather sparsely.

118. The following kinds of seeds were procured, through the kindness of the Inspector-General of Forests, from Upper India, and were sent to the Divisional Forest Officers of Násik, Poona and Sátára for experimental sowing on high altitudes in their divisions; the seeds were sown chiefly in the Lingmalá nursery of the Mahábaleshvar Range:—

Pinus longifolia.
Do. excelsa.

and seeds of—

Eucalyptus globulus.
Do. rostrata.
Do. piperita.
Cupressus toralosa.
Do. cashmeriana.
Acacia dealbata.
Do. melanoxylon.

which had been indented for upon the Conservator of Forests, Southern Circle, Madras, and which had been very kindly supplied, were likewise sent to all Divisional Forest Officers for cultivation in selected forests of their respective divisions.

119. As the anjan, Hardwickia binata, seeded very freely in Khándesh during the year, advantage was taken of the opportunity to send from that district considerable quantities of its seeds to the Deccan districts of Ahmednagar, Poona, Sholápur and Sátára, where the tree has not yet been introduced, for sowing in the dried forests, and innumerable seedlings have resulted from this operation: in the Bhámburdá reserved forest near Poona the young anjan plants are very plentiful and healthy.

120. No further experiments have been made with the date palm, the libi dibi and mahagoni, &c.; a few young trees of these kinds remain here and there, the relics of experimental sowings made in past years.

(*d*). Exploitation of Major Forest Produce.

(*1*). *Clear or Regeneration Fellings.*

121. In the East Khándesh Division a clear felling of trees was made in the river-side portion of the Trans-Purna reserved forest, where the bábul (Acacia arabica) is the predominating tree. One compartment of about 97 acres was thus exploited departmentally. Some disforested lands at the foot of the Sátpuda hills in the Yával and Chopda ranges were cleared of all trees, not with a view to regeneration, but to the land being utilized for cultivation; about 3,572 acres were thus cleared, and they yielded large quantities of firewood which was bought mostly for steam cotton factories at Chopda.

122. In the West Khándesh Division a compartment in the Ubhand forest of the Nizámpur Range was exploited under this system, the principal species being kheir (Acacia catechu) and kanchar (Acacia amara). The coupe was subsequently thickly sown up with seeds after the ground had been prepared for their reception.

123. In the Násik Division the teak and other trees in the dalhi numbers of 8 villages in the Kalvan Range and of 1 in the Báglán Range; the teak trees on occupied lands in 13 villages of the Peint Range which were felled and removed by their purchasers; and the departmental firewood fellings in the Somthána reserved forest of Yeola Range, in the Dongrála and Wanput forests of the Málegaon Range, and in the Mulána forest of Báglan, were all clear-fellings; those made in reserved forests were subsequently followed by sowings of seeds in the coupes for reproduction.

124. Of the Ahmednagar Division most of forests in black soil lands on the banks of rivers in the champaign country, wherein the chief tree is the bábul (Acacia arabica), have been divided into 62 forest blocks, and these have, each, been sub-divided into 40 compartments, and one compartment is made into the coupe of the season, wherein the standing stock is sold by auction for the purchaser to fell and remove at his own expense, within a fixed period of time, under prescribed conditions; 27 of these coupes situated in forest blocks extending over lands of 29 forest villages distributed over 8 ranges, representing a total area of nearly 178 acres, which were found to contain 17,024 trees, estimated to yield 56,043 cubic feet of firewood, sold for Rs. 1,902-8-0—a very moderate price, but at the same time not unsatisfactory, seeing that the system is new, and private enterprise in exploiting forests is still in its infancy, and will develop with time.

125. Similarly in the Poona Division, 52 coupes in river-side reserved forests, giving an acreage of 201½ nearly, and containing 17,692 trees, of an estimated yield of 144,991 cubic feet of firewood, sold for Rs. 6,525-12-0. The exploited coupes were then fenced with thorns, or wire, and were either fully ploughed over, or ploughed in lines 5 or 10 feet apart, according to their circumstances, and were sown with bábul and other seeds.

126. In like manner in the Sholápur Division ten compartments, of which 6 were in the Sholápur, 2 in the Mádhe, and 1 in the Pandharpur ranges, of

277 acres and 14 gunthás in the aggregate, sold for Rs. 11,077; some of the prices were very high; as the following will show :—

Range.	Name of Forest Block.	Area of Coupe.		Price		
		A.	g.	Rs.	a.	p.
Sholápur	Sholápur	33	4	5,141	0	0
	Irvádi	60	9	1,363	0	0
	Hátur	26	34	1,226	0	0
	Hodgi	31	15	153	0	0
	Márdi	32	37	62	0	0
	Karkal	16	39	1,802	0	0
Mádhe...	Papnus	26	1	262	0	0
	Mhaisgaon	34	2	850	0	0
Pandharpur	Karkamb	15	33	218	9	0
	Total ...	277	14	11,077	0	0

(2). Selection Fellings.

127. There were no operations of this class in the Khándesh, Násik, Ahmednagar and Poona divisions. In the Sátára District the removal of dead and dying timber from the reserved forests on the plains on the left bank of the Krishna River in the Tásgaon Range, may possibly come under this description, but the operation is rather one of improvement; and in the Sholápur Division a selection felling was made in the Sadar-Bázár reserved forest at Sholápur, where 18,735 cubic feet of firewood, mostly bábul, were removed departmentally, and sold by auction for Rs. 2,102, giving a very high profit.

(3). Improvement fellings and (4) Coppice fellings.

128. The fellings of teak in which regeneration is mainly dependent upon coppice shoots, but not entirely so, as seeds are sown within the coupes in prepared patches, and seedling trees are consequently grown, may be justly called a mixture of both of these systems;—improvement because the axe is directed with a view to remove old diseased ill-growing trees and to better the forest; —and coppice because the major portion of the trees, which are felled, reproduce by shoots from the old roots in the ground, and this is the mainstay of the reproduction.

129. In the East Khándesh Division, the teak forests in the Patna glen, and at Wadale also of the Chálisgaon Range; in Lahasur, Pimpalgaon and Gortale in the Jámner Range; were thus worked.

130. In the West Khándesh Division, the Dhulia and Sindkheda firewood fellings, and the Nizámpur teak fellings, were all improvement. Anjan (Hardwickia binata) is the principal tree in the Dhulia firewood forest, and as it coppices well, the good growth of new shoots is assured by trimming the stools with an adze, as the felling operation with the axe does not leave them flush with the ground, and clean and smooth.

131. In the Násik Division, twelve coupes in 4 ranges were worked for firewood, the species being mostly bábul.

132. In the Ahmednagar Division, bábul trees were exploited departmentally in the ranges of Nagar, Ráhuri, and Kopargaon for the improvement of seven forest blocks. 137 trees, containing 1,289 cubic feet of wood, were removed at a cost of about Rs. 1½ per 100 cubic feet, and the wood sold at Rs. 7-8-0 per 100 cubic feet; teak and jambhul forests in five ranges were worked departmentally on the coppice system, when 29,443 trees, which yielded 25,250 poles with 111,614 cubic feet of firewood, were felled; the cost of the operation amounting to Rs. 1,212-3-0, while the wood sold at auction for Rs. 8,547-5-9.

133. In the Poona Division, the teak and junglewood forests in the ranges bordering the Western Ghats were worked with a view to cutting out all unsound and inferior wood, and to produce good, vigorous coppice shoots from the stools of the felled teak trees which are mostly small of girth, short and

deformed. All young, sound and promising trees are reserved to develop, and to be natural shedders of seed. About 44,734 trees were felled in the forests of 6 ranges, producing 61,638 poles and miscellaneous pieces, with 29,690 cubic feet of firewood, which cost Rs. 2,858 to exploit, and realised Rs. 26,544 at auction sales.

134. One compartment in each of 9 different forest blocks, spread over six ranges in the Sátára Division, the aggregate area of the coupes being about 615 acres, was exploited departmentally, the timber being almost entirely teak: of which 9,456 pieces with 69,407 cubic feet of firewood, which had cost Rs. 2,296 to bring out to sale depôts, were sold at auction and realised Rs. 9,665. All young and promising growth was left to increase, and the reserves totalled about 4,111 teak, intermingling with 11,068 junglewood trees.

135. In the Sholápur Division, no forests are worked on either of these systems.

(5). *Unregulated Fellings.*

136. In the East Khándesh Division, the fellings made by the Bhils in exercise of their rights or privileges in the Sátpudá forests come under this denomination. There is absolutely no control, save the reservation of a few 3 or 4 favoured kinds of trees: they go into the forests and cut at will, removing what they like, and leaving to rot and burn what they like: they are not regulated by permits, are not restricted to particular or defined areas, nor tied down to any season or period of time. And the natural result is the depletion of certain, the more accessible, portions of the forests.

137. Under this heading too come all the timber fellings on the Bhil settlements in the West Khándesh Division, which are made in the Shirpur, Taloda, Akráni, Nandurbár, Navápur and Pimpalner ranges, the object being to cut as many trees as will sell, and to clear the lands for cultivation or unrestricted use by their occupants as soon as possible. The Bhil privileges in this division are likewise unregulated fellings in the fullest interpretation of the term.

138. Fellings of trees to meet free grants in all divisions are unregulated save by the demand; they have to be made at any time convenient to the grantees and in localities most suitable to them.

139. In the clearing of boundary lines of reserved forests in the Peint Range of the Násik Division, and in the several ranges of the Sátára Division, the fellings are only regulated by the growth on the ground to be cleared. In the same manner the clear fellings of teak and other royal trees upon occupied lands in the Násik, Poona and Sátára divisions are not regulated by any plan dictated by forestry.

(*e*). Extraction and Transport of Major Forest Produce by land and water.

140. Water carriage for the transport of forest produce is nowhere resorted to in the Central Circle at present. The timber and firewood cut departmentally in the several divisions are stacked at temporary sale depôts, either inside or outside the boundaries of the forests, generally in sites accessible to carts, and the removal of the wood subsequent to its sale is left to the purchasers. It is far better that private enterprise should concern itself with the distribution of timber and forest produce to satisfy the wants of local supply and the requirements of trade than the Forest Department should embark in such speculations. However, cases do happen when the market will not come to the forests, and the Forest Department have necessarily to convey timber and other forest produce long distances to obtain a market, but no cases of the kind have occurred in the Central Circle during the year of this report. When timber and other forest produce is sold on foot, or on the trees to purchasers, they are required to make their own arrangements for its felling, collection, extraction or exploitation.

141. Permanently maintained roads and fair-weather cart tracks have been constructed in all directions in the country of the Central Circle, and there are but few forest areas which have not been opened out to vehicular communication. The railways are freely utilised for the distribution of timber and other forest produce after such have been brought to the railway lines.

142. In West Khándesh the Tápti River is used by timber dealers and others who purchase from the Forest Department for floating timber from the Navápur Range to Surat. And it will possibly be found practicable to utilise the Narbada as a water-way, for the produce of the Akráni forests to be conveyed to the markets of Gujarát when these forests are fully worked. At present, how-

ever, paucity of establishments prevents the Akráni forests, which have only recently been settled under the Forest Act, being exploited to any considerable extent.

143. Bamboos are exploited and removed by purchasers and consumers from the forests of all the divisions of the Central Circle, except Sholápur, in headloads, cartloads, &c.

(*f*). Exploitation of Minor Forest Produce.

(*1*). *Extraction of Fodder.*

144. In the *West Khándesh Division*, there are seven valuable kurans, that is, portions of reserved forest the grass of which is sold annually to be cut and removed, but no grazing is allowed in them: 3 of these are in the Dhulia and 4 in the Sindkheda Range; their total area is 20,827 acres. In 1891-92 the right of taking the grass from them sold for Rs. 7,079, and in 1892-93 it went up to Rs. 9,055.

Grass can be removed from all open forests on payment of fees, except by privilege-holders, who may take it free; and from closed forests also by order of the Divisional Forest Officer. The fees charged are—

	Rs.	a.	p.
Cartload	0	2	0
Headload	0	0	3
Animal load	0	0	6

and during the forest year the undermentioned quantities of grass were removed from the West Khándesh forests:—

Cartloads	21,736
Headloads	5,131
Animal loads...	691

145. In *East Khándesh* the valuable kurans were farmed for Rs. 16,049 against Rs. 19,159 of the previous year; and 20,490 cartloads were taken from closed forests. The rainfall of the season had been favourable to the growth of grass, which was luxuriant, and consequently the demand on the forests was not so great, as there was abundance of grass on lands outside the forest boundaries.

146. In the *Násik Division*, the purchasers of the grass are allowed to cut and remove the grass after the 15th September, and then to graze cattle on the stubble; there are 32,542 acres of valuable kuran the revenue derived from which amounted to Rs. 15,832, which is slightly less than of the year before.

147. In the *Ahmednagar Division* the grass in about 45,532 acres of the reserved forest was sold for extraction by hand, and realised Rs. 2,092: while 5,061 acres are placed free of charge at the disposal of the Commissariat and Remount Departments for grass supply as under—

Forest.	Area.	Estimated Value.
Given to Remount Department.	A. g.	Rs. a. p.
Kaudgaon	51 25	82 9 7
Jamb	45 11	72 7 8
Narayen doho...	34 4	54 8 11
Chichondi Patil	596 10	954 0 0
Total ...	727 10	1,163 10 2
Given to the Commissariat Department.		
Kapurwádi	828 17	1,000 0 0
Deogaon	126 20	1,250 0 0
Shendi	272 36	2,000 0 0
Sesevádi	557 12	2,000 0 0
Imámpur	733 34	2,250 0 0
Gunjale	346 37	750 0 0
Manjursumbha	535 17	1,500 0 0
Ghospuri	822 14	1,250 0 0
Ratadgaon	110 0	1,250 0 0
Total ...	4,333 27	13,250 0 0
Grand Total ...	5,060 37	14,413 10 2

148. The revenue from grass in the *Poona Division* came to Rs. 2,923-5-0; no grazing is permitted in the valuable kurans; 19,118 acres of reserved forest in the neighbourhood of the city of Poona are placed at the disposal of the Commissariat Department at Poona, for the supply of hay to feed Government cattle and horses belonging to the Military Department. Some of the best grass-producing lands are thus disposed of: the value of the grass on account of which no charge is made upon the Military Department is estimated to be Rs. 25,850, which is a dead loss to the forest revenues, and a loss of Rs. 12,925 to the Provincial Service Budget.

149. In the Sátára Division it is estimated that about 3,500 tons of fodder grass were extracted from the forests. The area of the valuable kurans which were sold for grass cutting was about 10,458 acres, and they realized about Rs. 5,900.

150. The grass in all the closed forests of the *Sholápur Division* is put up to auction sale for extraction by hand, and a fair proportion of it is sold; about 35,936 acres found purchasers, and Rs. 15,065 were obtained in this way.

(2). Grazing.

151. In all open forests in the Khándesh District grazing is allowed on payment of fees; no grazing is sold by auction in the two divisions of Khándesh. The rates of fees charged are as under :—

	Rs.	a.	p.
For Cultivators.			
For each buffalo	0	8	0
„ cow, horse or ass	0	4	0
„ sheep	0	1	0
For Professional Graziers.			
For each buffalo	1	0	0
„ cow, &c.	0	8	0
„ sheep.	0	2	0
„ goat	0	8	0

In the wilder portions of the district the cultivators' cattle pay half-fees, but privilege-holders, Bhils and inhabitants of forest settlements, graze their cattle free of charge.

152. In the *East Khándesh Division* the whole of the Sátpudá forests, with the exception of 3,613 acres, and all the open forests in the South Tápti ranges, were made available for grazing, and 191,771 head of cattle of different kinds entered and pastured therein on payment of fees, while to 8,898 animals free grazing was given.

The grazing receipts came to Rs. 54,640, or Rs. 5,096 less than of the year before; the decrease being attributable to fewer animals having been sent from foreign territory to find grazing in the East Khándesh forests, owing possibly to a good grass season over the border.

153. In the *West Khándesh Division* 387,465 animals were grazed inside the forests during the twelve months ending 31st March 1893, and 60,841 animals paid fees during April, May and June, so that altogether 451,306 animals grazed on payment of fees aggregating Rs. 98,267, while 24,862 animals enjoyed free grazing of the value of Rs. 5,574.

154. In the other divisions of Násik, Ahmednagar, Poona, Sátára and Sholápur the schedule of grazing fees is as under :—

Kind of Animals.	Permits issued by Village Officers.		Permits issued by Forest Officers.
	Cultivators' Cattle.	Professional Graziers.	Outside Cattle.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Buffaloes, each	0 8 0	1 0 0	1 0 0
Cows	0 4 0	0 8 0	0 8 0
Horses and asses	0 4 0	0 8 0	0 8 0
Sheep	0 1 0	0 2 0	0 2 0
Goats	0 2 0	0 4 0	0 4 0

155. In the *Násik Division* 172,848 cattle of different kinds, including 55,370 sheep and goats, grazed in the forests on payment of fees, and 49,552 cattle,

including 4,592 sheep and goats in the Peint Range, enjoyed free grazing. The fodder grass and grazing revenue amounted to Rs. 59,377-3-3, or nearly Rs. 8,220 less than of the previous year. The decrease is said to be owing to foreign cattle having come in fewer numbers to find grazing in the Násik forests.

156. The valuable kurans of the *Ahmednagar Division* extend over 3,901 acres, and the right of grass and grazing in them sold for Rs. 3,297, while 279,519 acres of open forests were made available for grazing on payment of fees, by which a sum of Rs. 33,650 was realized. There was considerable illicit grazing in the forests, owing to village cattle-owners neglecting to take out grazing permits, and to village officers neglecting to see that their villagers who own cattle and habitually graze those animals in the forests, were supplied with grazing permits, so that a sum of Rs. 4,730 was recovered under Section 67 of the Forest Act for damage done by illicit grazing. But there is a marked improvement in this respect. 108,817 cattle of the bovine species and 54,653 cattle of the ovine kinds were grazed within the forests, and these figures show an increase of 17,147 of the former, and 13,850 of the latter, on the figures of 1891-92, which is said to be owing to the fact that villagers are recognizing that it is more profitable to them to take out grazing permits on payment of the low rates of fees demanded than to fail to do so, and graze their animals illicitly, at the risk of the cattle being caught and impounded. Nearly 65,342 acres of forests distributed over 9 ranges are specially assigned for sheep grazing; and 54,651 of these animals took advantage of this provision on payment of fees.

157. In the villages along the Western Ghâts of the Poona Division the right of grazing in the open forests is sold by auction; and thus out of a total grazing revenue amounting to Rs. 40,139-11-6, Rs. 11,546-3-0 were realized from fees and Rs. 28,593-8-6 by auction sales. The revenue shows a decline of Rs. 2,067 compared with the figures of 1891-92. In this division the number of cattle given free grazing is very large indeed, amounting to 105,188, and exceeding by no less than 14,992, the number of cattle in respect of which fees were paid for forest grazing. The village officers are seemingly very liberal in their differentiation of cattle between the privileged and the paying: and they are also seemingly very backward in issuing permits to village cattle-owners, and connive with the latter in defrauding the grazing revenues.

158. Grazing is permitted on contract in 37,013 acres and 36 gunthás, comprising the best pasturing portion of the reserved forests in the *Sátára Division*, into which no sheep or goats are permitted. There are, in addition thereto, 271,153 acres of open forests throughout the division made available to grazing where fee-paying and free cattle are admitted to graze side by side. The more valuable pasture lands realized Rs. 20,264-3-6 at the auction sale of grazing; the valuable kurans reserved for exploitation of grass by hand realized Rs. 5,900-7-9, while fee grazing gave a revenue of Rs. 8,710-7-6, and a sum of Rs. 1,885-7-3 was obtained by sale of grass from closed forests. It is a remarkable fact that the number of cattle grazed on payment of fees was only 76,758 in the open forests, while the very large number of 290,419 cattle were given free grazing. Like in the Poona Division so in the Sátára Division the differentiation of privileged and paying cattle has been made with extreme liberality; indeed it is doubtful whether there has been adequate scrutiny of the lists, or proper supervision of the proceedings of the village officers in this matter, who are seemingly very reluctant to issue grazing permits and to collect grazing fees from village cattle-owners, for 47,994 cattle were impounded for illicit grazing, of which number 17,276 were caught in open forests, and it would have been more profitable to their owners to have taken out permits.

159. The *Sholápur Division* has returned a comparatively large revenue, amounting to Rs. 24,086-13-8, from grass and grazing. The valuable kurans spread over 35,936 acres in 52 villages, and the grass in them was sold for exploitation by hand. The open forests, in addition to the kurans in which free and free grazing was allowed, measured 46,066 acres, wherein 27,345 cattle grazed on payment of fees, and 11,383 cattle were permitted to enter on free permits of the value of Rs. 2,413-8-0. The total grass and grazing revenue amounted to Rs. 24,086-13-8—a figure which compares very favourably with the results shown in the Poona and Sátára divisions, the total forest area of the former being 741 square miles and of the latter 693, square miles, against 278 square miles of the Sholápur Division

160. The cattle census of the different districts comprising the Central Circle will be seen in the following statement :—

No.	Collectorate.	Cows and Bullocks.	Buffaloes.	Horses.	Asses and Mules.	Sheep.	Goats.	Camels.	Elephants	Total.
1	Khándesh	746,849	194,360	24,812	8,299	226,720		7	...	1,201,047
2	Násik	514,561	73,009	15,040	3,150	120,950	157,900	1	...	884,611
3	Ahmednagar ...	677,599	57,379	24,251	8,188	325,823	256,024	8	...	1,349,272
4	Poona	490,932	68,199	13,373	5,248	224,472	148,447	103	...	950,774
5	Sátára	516,225	152,659	15,415	2,648	355,711	115,547	4	...	1,158,209
6	Sholápur	435,733	64,307	12,896	3,906	249,252	133,841	...	...	899,935
	Total ...	3,381,899	609,913	105,787	31,439	1,276,208	811,759	123	...	6,443,848
						226,720				

(3). Miscellaneous Produce.

161. Under this heading come flowers, fruits, honey, wax, surface soil, rock and minerals, reeds, oil, bark, &c., &c.

Rôsha oil (Andropogon schœnanthus) is manufactured in the Khándesh and Násik districts from a particular lemon grass of great fragrance which grows wild in the forests. The contract is sold by auction or tender, and the number of furnaces to be erected, and the rate to be charged per still, are arranged and specified in the contractor's agreement. The revenue derived from this source amounted to about Rs. 15,098-14-6.

162. Hirda nuts, fruit of the Terminalia chebula, are collected in the moist forests along the Western Ghâts where the tree grows in profusion.

In the Násik Division the right of collecting and taking the nuts from the Government trees in the forests during the season is sold by auction, forest by forest, and is knocked down to the highest bidder; the purchaser pays in kind, and not in money, and the nuts, which are paid in at the forest-depôts, are then sold by auction or tender.

In the Ahmednagar Division the hirda nuts are brought from the forests to forest depôt houses centrally situated by forest villagers. The outturn was very small—only about 54 khandis, 8 maunds and 16 pounds, each khandi being of 784 pounds. The cost amounted to Rs. 582-11-3, while the nuts sold for Rs. 745-11-0. There has been a steady decline in the hirdas brought to the forest depôts since 1888-89, and no doubt it is greatly due to pilfering from the forests. The quality of the nuts this season was bad owing to late rains, and consequently the selling price was comparatively very low; it declined from Rs. 73-4-0 in 1891-92 to Rs. 45.

In the Poona Division, hirdas are exploited on the share system, the right is sold by auction, and the purchase-money is paid in kind; and in this way 169 khandis, 16 maunds and 2 pounds were brought into the forest depôts, and were subsequently sold for Rs. 3,679-1-4. Compared with the previous year there is a decided falling off both in quantities and in prices, the season having been a bad one.

In the Sátára Division a large quantity of hirda nuts was brought to the different forest depôts along the ghâts by the forest villagers, who were paid at fixed rates; 824 khandis, 16 maunds and 16 pounds were thus received, the deshi khandi of Sátára equalling 1,920 pounds. The price paid for these nuts to the forest villagers amounted to Rs. 6,268-4-11, which must be a very appreciable addition to their income or other means of livelihood; subsequently the nuts were sold for Rs. 16,945-1-0. By dryage and shrinkage the loss amounted to 206 khandis, 22 maunds and 13 pounds, or 19·8 per cent., which is undoubtedly large; the price was indifferent, as it represented a fall of over 12 per cent. on the selling prices of the previous year.

163. "*Tarwad bark*" of the Cassia auriculata is worked on a rotation of five years, and is sold in the Poona, Sátára and Sholápur divisions for exploitation by the purchasers. Other miscellaneous produce is removed in the same way.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

I.—DEPARTMENTAL OPERATIONS.

(1). Timber.

164. The outturn, in cubic feet, of timber exploited departmentally from the forests of the different divisions of the Central Circle, with the cost incurred and the amount realized by its sale, during the forest year under report, compared with the results of the year preceding, is given in the following statement:—

No.	Division.	1891-92.			1892-93.		
		Timber in the rough.	Cost.	Receipts.	Timber in the rough.	Cost.	Receipts.
		C. ft.	Rs.	Rs.	C. ft.	Rs.	Rs.
1	East Khándesh	19,532	1,339	10,448	18,740	1,273	10,152
2	West Khándesh	145,812	4,158	48,985	141,025	4,044	63,192
3	Násik	26,802	206	3,103	15,894	72	1,125
4	Ahmednagar	35,190	1,261	7,977	64,514	1,215	7,873
5	Poona	50,785	3,088	26,130	61,638	2,877	26,544
6	Sátára	20,041	1,470	13,618	13,545	1,154	9,058
7	Sholápur	931	5	90	...	...	...
	Total ...	299,093	14,527	1,10,351	315,356	10,635	1,17,944

165. It should be remembered that although the figures of 1892-93 cover a period of fifteen months, the exploitations which took place during the last three months were comparatively inconsiderable, and of no great value.

166. In the East Khándesh Division the departmental fellings of teak (Tectona grandis) were not so extensive as during 1891-92; the greater portion was obtained from the clearances effected upon disforested lands in the Chopda and Yával ranges: but owing to higher prices obtained at the auction-sales the difference in recipts is trifling.

167. Departmental operations in timber in the West Khándesh Division were chiefly restricted to the teak (Tectona grandis) and blackwood (Dalbergia latifolia) fellings which were carried on in the Bhil settlements or in revenue waste lands all over the division, except in the Nizámpur Range. The timber fetched better prices than ruled the year before; and hence the increase of revenue upon that of the preceding year.

168. Departmental operations were undertaken, as usual, in the Deccan divisons of Násik, Ahmednagar and Poona, and the variations both in cost and receipts, except in the Násik District, where a smaller quantity of timber was felled, are so small as to require no special explanation.

169. The difference in outturn and receipts in the Sátára Division was due to reduced fellings: large quantities of teak timber standing upon occupied lands were being sold, and therefore it was deemed advisable to decrease the volume of departmental fellings in the forests so as not to glut the market.

170. In the Sholápur Division there were no departmental operations, as all the timber exploited was sold standing in the forests, to be felled and removed by purchasers.

(2). Firewood.

171. The following statement gives the outturn of firewood including the loppings of teak (Tectona grandis), bábul (Acacia arabica) and other trees felled departmentally in the several divisions of the Central Circle, together with the

expenditure incurred, and the amount realized, compared with the results of the year preceding :—

No.	Division.	1891-92.			1892-93.		
		Firewood.	Cost.	Receipts.	Firewood.	Cost.	Receipts.
		C. ft.	Rs.	Rs.	C. ft.	Rs.	Rs.
1	East Khándesh	404,910	2,999	14,230	1,022,985	6,480	29,778
2	West Khándesh	385,562	1,836	11,014	431,766	2,407	12,433
3	Násik	227,984	1,150	3,795	129,463	677	3,322
4	Ahmednagar	154,818	...	755	111,614	18	635
5	Poona	81,081	356	1,796	45,365	184	836
6	Sátára	244,920	1,343	4,230	376,341	2,207	4,910
7	Sholápur	15,130	100	1,293	18,735	109	2,103
	Total ...	1,514,405	7,784	37,113	2,136,269	12,082	54,017

172. The increase in the outturn of firewood in the East Khándesh Division is chiefly due to very extensive clearances of trees from disforested lands in the Chopda and Yával ranges. The bábul-wood (Acacia arabica) felled in the Edlabad Range fetched a very high price; and the firewood cut in the Chopda Range was all bought up by the local ginning factories and steam presses, but the firewood in the Yával Range failed to obtain the price expected for it, and consequently it remained on hand at the close of the year.

173. In the West Khándesh Division the departmental fellings of firewood were confined mainly to three species which predominate, *viz.*, anjan (Hardwickia binata), kheir (Acacia catechu) and bábul (Acacia arabica). The demand for firewood of these kinds in the town of Dhulia more particularly is very considerable.

174. In the Násik, Ahmednagar and Poona divisions the firewood operations and their results are approximately the same as of the year preceding.

(3) Other Minor Produce.

175. The subjoined statement exhibits the results of the departmental collection of hirda fruit (Terminalia chebula) made during the year in the divisions of Násik, Ahmednagar, Poona and Sátára, compared with those of the preceding year :—

No.	Division.	Yield.		Cost.		Receipts.		Remarks.
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	
		Kh. m. lbs	Kh. m. lbs.	Rs.	Rs.	Rs.	Rs.	
1	Násik	49 0 0	39 4 8	21	21	1,431	773	
2	Ahmednagar	100 3 20	54 8 16	852	583	3,100	784	
3	Poona	265 5 8	.....	...	...	6,081	...	
4	Satara	741 10 13	824 16 16	5,097	6,268	19,409	16,945	
	Total ...	1,155 19 13	918 1 12	5,970	6,872	30,021	18,502	

176. No other minor produce was collected departmentally.

177. In the Násik Division the outturn of hirdas was very poor owing to a blight which attacked the flowers, and the price obtained compared very unfavourably with the preceding year's prices : this is attributed to the inferior quality of the fruit owing to the effects of the blight.

178. The collections of hirdas brought to the forest depôts in the Ahmednagar Division were also very small, for the crop on the trees was an indifferent one ; there has, however, been a steady decrease, ever since 1888-89, in the quantities of hirdas brought to the forest depôts in the Akola Range, owing, seemingly, to the nuts being purloined from the Government trees in the forests and illicitly exported from the district. The Koli villagers, who inhabit the forest villages bordering the Syhádri mountains in the moist forests where the Terminalia chebula abounds, find it to be a profitable venture to rob the trees in the Government forests of their fruit and to sell the latter to village

shop-keepers and money-lenders, and sometimes to carry the nuts themselves to railway stations in the Násik and Thána districts for sale; and it is very difficult indeed to detect and apprehend them in the act. The Kolis, moreover, are lawless and violent, and the forest guards are not generally very ready to tackle them in the forests. Dealers from the Junnar Táluka of the Poona District come to the Akola frontier, and tempt the forest villagers to bring and sell to them illicitly acquired hirdas; and in the same way, on the north side, dealears from Násik induce the villagers to bring stolen hirdas to the Ghoti Station on the G. I. P. Railway. The large number of hirda trees on private lands in the Akola forest villages facilitate the robbing of the Government trees in the forests; and until effective control over hirdas being moved from villages and from the range, in head loads and by carts, is enforced by a system of passes under the rules of Section 41 of the Forest Act, it will not be possible to stop the smuggling that goes on. The Collector has recorded his opinion that "the short hirda crop is due to pilfering."

179. In the Sátára Division the quantity of hirdas brought to the departmental depôts was much greater than of last year, but the selling rates were very low, and consequently the revenue derived from this service was very much below the estimate.

II.—REMOVAL OF PRODUCE BY PURCHASERS.

180. The following statement shows the outturn, in cubic feet, of the timber removed from the forests of the several divisions of the Central Circle, by purchasers at their own expense and the amounts realized, compared with the results of the year preceding:—

No.	Division.	1891-92.		1892-93.	
		Timber in the rough.	Amount realized.	Timber in the rough.	Amount realized.
		C. ft.	Rs.	C. ft.	Rs.
1	East Khándesh	213,000	4,354	255,105	6,024
2	West Khándesh	213,750	8,834	158,189	17,300
3	Násik	641,262	33,488	567,541	30,346
4	Ahmednagar	305	158	...	267
5	Poona	193,774	235	1,413	1,395
6	Sátára	2,230	801	25,023	12,341
7	Sholápur	129	176	302	11,155
	Total ...	1,264,450	48,096	1,007,573	78,828

181. In the two divisions of the Khándesh Collectorate some standing trees upon disforested lands were sold to be felled and removed by the purchasers, but the larger portion of the exploitation from the forests was made by privilege-holders on permits on the fee system; and the quantities of timber thus removed were greater than of last year, so that the receipts compare favourably with the results of that year.

182. The revenue under this sub-heading in the Násik Division is, for the most part, derived from teak (Tectona grandis) trees sold standing for being felled and removed upon occupied lands outside the boundaries of the reserved forests in the Peint Range. The teak trees on the cultivation lands in groups of villages are sold yearly, and a complete group was offered for sale this year, but the demand was weak, and the offers were low, and therefore, as many villages as had been put up for sale were not sold, but a few were held back; thus there is a decline apparent both in the volume of timber and in the revenue.

183. The quantity of timber removed from forests on payment of fees prescribed in Government Resolution No. 8494, dated 14th December 1887, by the residents of the 44 ghát villages of the Akola Range of the Ahmednagar Division was comparatively larger, and consequently the receipts were also greater.

184. The timber removed by purchasers in the Sátára Division consisted chiefly of teak, royalty trees, which are sold at Re. 1 per tree upon lands occupied for cultivation outside the forest boundaries, and as the demand for these trees was greater this year than last, the revenue is larger.

185. The coupe sales system in the Sholápur Division was very successful. The bábul forests on the banks of rivers and streams in the open plain country have been blocked, and divided into compartments, and some of the latter have been converted into coupes for the sale of the standing timber which has been grown during the last 20 years. The results of some of these sales may be seen in the following figures :—

Range.	Name of Forest.	Area in Acres.	Price.
			Rs.
Sholápur ...	Sholápur Coupe No. 2	33	5,141
Do. ...	Irvádi Budruk Coupe No. 1	60	1,363
Do. ...	Karkal and Lánwgi Coupe No. 1	17	1,802
Do. ...	Hátur Coupe No. 1	27	1,226
Do. ...	Hodgi do. 1	31	153
Do. ...	Márdi do. 1	33	62
Mádhé ...	Pápnus do. 1	26	262
Do. ...	Mhaisgaon do. 1	34	850
Pandharpur ...	Karkamb do. 1	16	218
	Total ...	277	11,077

These results are highly satisfactory; and they point to the very high importance of sylviculture in the champaign country of the Deccan in the great demand for wood.

186. This statement shows the quantity of firewood removed by purchasers, and the revenue obtained thereby, both by sales of coupes and by issues of permits on payment of fees :—

Division.	Firewood in cubic feet.		Receipts in Rupees.	
	1891-92.	1892-93.	1891-92.	1892 93.
East Khándesh...	1,135,280	1,299,200	9,459	10,711
West Khándesh	167,900	167,900	3,394	8,542
Násik	90,568	331,704	1,381	3,869
Ahmednagar	62,797	81,843	3,480	3,846
Poona	42,849	184,543	8,315	8,002
Sátára	9,854	20,596	468	325
Sholápur	1,692	1,585	4,337	491
Total ...	1,510,940	2,087,371	30,834	35,786

187. The following statement exhibits the bamboos which were removed by purchasers from the forests of all the divisions of the Central Circle except Sholápur, both under contracts and on permits, in head-loads, cart-loads, &c.:—

Division.	1891-92.				1892-93.			
	Bamboos removed.			Amount Realized.	Bamboos removed.			Amount realized.
	Cart-loads.	Head-loads.	Number.		Cart-loads.	Head-loads.	Number.	
				Rs.				Rs.
East Khándesh	...	...	407,845	4,674	...	...	1,131,212	10,122
West Khándesh...	...	...	171,782	2,600	...	...	13,1253	4,731
Násik	...	9,989	196,203	4,702	585	...	266,637	6,189
Ahmednagar	...	...	32,847	342	...	...	46,578	773
Poona	...	...	148,422	1,540	...	...	142,151	1,477
Sátára	...	1,968	14,675	329	...	9	53,416	1,110
Total ...	....	11,957	971,774	14,187	585	9	1,771,247	24,402

188. The subjoined statement exhibits the realizations from "*minor forest produce*," including hirda (Terminalia chebula), stones, earth, thorns, fruits, rosha oil (Andropogon schœnanthus), karvi, tarwad bark (Cassia auriculata), tembhurni and apta leaves, &c., removed by purchasers from the forests, but not including the receipts by sale of grass or of the right of grazing or derived from grazing permits, compared with the results of the previous year:—

No.	Division.	Amount, 1891-92.	Amount, 1892-93.
		Rs.	Rs.
1	East Khándesh	1,208	1,665
2	West Khándesh	8,097	15,785
3	Násik...	4,544	1,774
4	Ahmednagar	1,370	1,479
5	Poona	7,414	4,634
6	Sátára...	3,310	3,045
7	Sholápur	541	67
	...		
	... Total ...	26,514	28,449

III.—FREE GRANTS OF FOREST PRODUCE.

189. The following is a comparative statement of free grants of timber which have been made by Revenue Officers in almost all cases during the last three years:—

No.	Division.	1889-90.	1890-91.	1891-92.	1892-93.
		Rs.	Rs.	Rs.	Rs.
1	East Khándesh	...	...	210	...
2	West Khándesh	45	142	714	458
3	Násik	267	217	177	274
4	Ahmednagar	297	10	139	...
5	Poona	539	519	709	628
6	Sátára	354	699	...	136
7	Sholápur	...	...	...	...
	Total Rs....	1,502	1,587	1,949	1,496

IV.—PRODUCE REMOVED BY RIGHT-HOLDERS AND UNDER PRIVILEGES.

190. It is quite impossible to arrive at any approximately correct estimate of the value of the timber and other forest produce removed by right-holders and concessionaries under the privileges granted to them, because the removals are not tied down to any particular portion of a forest and to any prescribed season, and are not regulated by a system of permits or passes. Suffice it to say that the quantities of timber, firewood, grass, and other minor produce removed from the forests by the wild tribes for private consumption and for barter or sale are very large.

191. The free grazing which has been allowed within the reserved forests as a privilege to agricultural and milch cattle has been controlled by issue of free grazing permits, so that it is possible to give the number of cattle entered in the privileged lists in each division, and the value of the grazing conceded to them, and these particulars will be found in the following figures:—

No.	Division.	Number of Cattle.	Value of grazing.
			Rs.
1	East Khándesh	8,898	2,587
2	West Khándesh	24,862	5,574
3	Násik...	49,552	13,541
4	Ahmednagar	9,093	3,264
5	Poona...	105,188	24,066
6	Sátára	290,419	75,023
7	Sholápur	11,383	2,416

192. It would appear that in the Násik Division a large number of sheep and goats have been admitted to free grazing. As these animals are neither agricultural nor milch cattle, they seemingly ought not to be on the privileged list. In Ahmednagar and Sholápur the differentiation of cattle between paying and free has been made with great care, but in Poona and Satára the privileged list is extravagantly large; and the consequent loss of revenue exceeds a lakh of rupees, whereby the Provincial Funds suffer to the tune of Rs. 50,000 and more.

V.—SUMMARY OF PRODUCE REMOVED FROM THE FORESTS.

193. The following is a summary of produce removed from the forests :—

Description of Material.		Quantity.
Timber	Cubic feet.	1,396,023
Fuel	Do.	6,723,865
Bamboos	No.	1,771,322
Do.	Cart-loads.	585
Do.	Head-loads.	9
Stone	Cart-loads.	29,117
Do.	Cubic feet.	243,926
Thorns	Cart-loads.	4,311
Do.	Cubic feet.	5,040
Do.	Head-loads.	9,329
Manure	Cart-loads.	2,571
Do.	Cubic feet.	14,403
Anjan leaves	Cart-loads.	593
Rosha-oil stills	No.	185
Earth	Cart-loads.	1,427
Karvi	Do.	478
Do.	Head-loads.	2,817
Do.	Cubic feet.	110,411
Reeds	Cart-loads.	865
Sand	Do.	230
Limestone	Do.	1,805
Grass bundles...	...	86,875
Do.	Cart-loads.	227
		Kh. mds. lbs
Hirda nuts	...	986 24 7
Roofing material	Cart-loads.	450
Do.	Head-loads.	858
Aloes	Do.	43
Canes	Do.	400

CHAPTER IV.

FINANCIAL RESULTS.

194. The forest year 1892-93 was a financial success, as will be seen from the following statement, which exhibits a comparison of the results of that year with those of the preceding :—

Year.	Receipts.	Expenditure.			Net Revenue.
		A. Conservancy and Works	B. Establishments.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1891-92...	7,48,154	1,32,453	3,42,224	4,74,677	2,73,477
1892-93...	8,23,495	1,60,625	4,27,367	5,87,992	2,35,503
Increase ...	75,341	28,172	85,143	1,13,315	...
Decrease ...	...	...	...	...	37,974

195. The gross revenue of the year exceeds that of its predecessor by Rs. 75,341, while the total expenditure exhibits an increase of Rs. 1,13,315 over the figures of past year, made up of Rs. 28,172 under "A. Conservancy and Works" and Rs. 85,143 under "B. Establishments." In connection with this increase it may be stated that the figures for the year under report represent the results of 15 months, and when the receipts and expenditure for the 3 months of April, May and June 1893, which are respectively Rs. 71,708 and Rs. 1,05,513, are deducted from the total receipts and expenditure for 15 months, the net results for 12 months, when compared with those of the preceding year, show that there was an increase of Rs. 3,633 in receipts, and of Rs. 7,802 in expenditure. The increase of Rs. 7,802 is made up of Rs. 5,580 under "A. Conservancy and Works" and Rs. 2,222 under "B. Establishments," the former being due to felling operations having been undertaken on a larger scale in some divisions, and the latter generally to the increased rates of salaries drawn by Forest Officers under the reorganization scheme sanctioned by the Secretary of State for India, and given effect to from the opening of the year. As regards the increase of Rs. 33,805 in expenditure during the period of 3 months, *viz.* April, May and June 1893, over the revenue collected during the same period, it may be explained that very little revenue is received during these three months, but it commences to pour in later on; sales of timber do not take place till after the rains, grazing fees are paid when the grazing season opens, and revenue derived from fodder grass is generally paid into the treasuries in the autumn.

196. The following statement will show the distribution of receipts of the forest year among the several divisions of the Central Circle, and a comparison of them with the collections of the year preceding:—

No.	Division.	1891-92.	1892-93.	Increase.	Decrease.
		Rs.	Rs.	Rs.	Rs.
1	Direction	4	2	...	2
2	East Khándesh	1,50,811	1,67,237	16,426	...
3	West Khándesh	2,02,943	2,55,787	52,844	...
4	Násik	1,22,513	1,14,960	...	7,553
5	Ahmednagar...	57,411	61,256	3,845	...
6	Poona	95,189	96,613	1,424	...
7	Sátára	88,642	87,787	...	855
8	Sholápur	30,641	39,853	9,212	...
	Total ...	7,48,154	8,23,495	83,751	8,410

197. The increase of Rs. 16,426 in the East Khándesh Division is due to very extensive clearances of tree growth off the disforested lands at the foot of the Sátpudas in Chopda and Yával ranges, and to the collection of "duty on foreign timber" during the additional three months, when the import trade is very brisk. The increases from these two sources have more than counterbalanced the decreases under II. *d.* "Grazing" and V. *c.* Other sources," which are Rs. 9,900 and Rs. 3,010 respectively—the former being due to less demand for grass to be removed on permits by cultivators owing to abundance of grass grown upon their own lands, while the latter is owing to a smaller amount having been realized in payment of sums of money by way of compensation for forest offences compounded under Section 67 of the Forest Act.

198. The quantity of timber and firewood exploited departmentally in the West Khándesh Division was greater than last year, and the prices realized were also very good. Nearly all the material was sold; a little remains on hand in the Akráni range. The revenue derived from duty on foreign timber also exhibits an increase of Rs 3,000, and these items account for the increase of Rs. 52,844 in the West Khándesh Division.

199. The decrease in the Násik Division of Rs. 7,553 is mostly due to a falling off in grazing receipts in Sinnar, Dindori, Chándor, Yeola, Nándgaon, Báglán and Kalvan ranges. Kuráns also failed to fetch as much revenue as in the year before. Fee collections from sheep grazing likewise declined.

200. In the Ahmednagar Division the gross receipts were the highest on record since 1885-86, and even deducting the revenue realized during the three months of April, May and June 1893, excluding receipts from teak and hirda of the previous year, and which amounts to Rs. 1,192, the revenue is still higher by Rs. 2,653; and this increase is chiefly due to realizations from grass and grazing, consequent to better prices for grass, and to the permit system of grazing having been availed of to a greater extent than in the year preceding. The revenue would have been still higher had there not been a failure of hirda crop, which was even less than half the normal average.

201. The small increase of Rs. 1,424 in the Poona Division is apparently due to realizations during April, May and June 1893, amounting to Rs. 2,138, having been added to the receipts of the past twelve months. The revenue for the twelve months, if compared with that of the year before, shows a small decrease, and this is chiefly accounted for by falling off in the grazing fees, and to some grass and grazing sales having failed. The hirda crop was also short, and the free concession of karvi, shikakai and other minor produce helped to contribute to the decrease of revenue.

202. The revenue of the Sátára Division has almost approached the figure of the year preceding, showing but a slight decrease of Rs. 855, which calls for no remarks. The Sholápur Division, on the other hand, exhibits an increase of Rs. 9,212, and is mostly owing to better realizations under the heads I. (*b*) Firewood, II. (*a*) Timber and II. (*d*) Grazing and Fodder Grass.

203. The expenditure under "A. Conservancy and Works" distributed among the several forest divisions of the Central Circle, as compared with that of the preceding year, is as under;—

No.	Division.	1891-92.	1892-93.	In crease.	Decrease.
		Rs.	Rs.	Rs.	Rs.
1	Direction	567	3,338	2,771	...
2	East Khándesh	16,578	19,021	2,443	...
3	West Khándesh	22,997	28,626	5,629	...
4	Násik	15,996	15,306	...	690
5	Ahmednagar	13,331	13,818	487	...
6	Poona	37,901	48,563	10,662	...
7	Sátára	18,276	22,920	4,644	...
8	Sholápur	6,807	9,033	2,226	...
	Total ...	1,32,453	1,60,625	28,862	690

204. The increase of Rs. 2,771 against "Direction" is due to the cost of maps supplied by the Superintendent, Photozinco Department, Poona, and to the cost of preparing and sending specimens of timber and forest products for the Chicago Exhibition, under orders contained in Government Resolution No. 7410, dated 19th September 1892, in the Revenue Department, having been adjusted in the accounts of the Conservator.

205. The East Khándesh Division exhibits an increase of Rs. 2,443 over the figures of past year, owing partly to the expenditure during the additional three months having been debited, and partly to the expenditure under A. I. *b*. Firewood.

206. The small increase of Rs. 2,443 against the West Khándesh Division is due to the departmental operations under timber and firewood having been undertaken on a larger scale. The expenditure during the additional three months is also, to some extent, the cause of the increase.

207. The small decrease, in Násik, of Rs. 690 is accounted for by less demarcation work, *i. e.*, of defining the boundaries of forest reservations upon the ground by the erection of special forest boundary marks in the ranges of Dindori, Peint, Yeola, Málegaon and Báglán.

208. There is a small increase of Rs. 487 against the Ahmednagar Division which is accounted for by the cost of barbed wire for fencing purposes.

209. The debit of a large sum of Rs. 28,929, on account of forest survey charges, in the accounts of the Poona Division has raised the expenditure in that

division, and hence the increase. In like manner a large portion of the increase of Rs. 2,226 in the expenditure of the Sholápur Division can be explained by the debit of Rs. 2,153 on account of forest survey charges, and the remaining small portion to the purchase of wire for fencing.

210. The increase of Rs. 4,644 in the Sátára Division is due partly to the increase in the establishment of the Forest Settlement Officer, and partly to the expenditure for three months having been added to that of the past twelve months.

211. The small increase of Rs. 2,222 under B. Establishments, when the results of 12 months are compared with those of the past year, and of Rs. 85,143 when the expenditure of 15 months is taken into account, calls for no remarks, as the increase is mostly due to the increased rates of salaries drawn by superior Forest Officers under the reorganization scheme which was given effect to from 1st April 1892, as stated in paragraph 195 above, and to the expenditure on account of salaries of officers, &c., for the additional three months.

CHAPTER V.

FOREST ADMINSTRATION.

212. The forest administration has, under Government Resolution No. 7107, dated 6th September 1892, in the Revenue Department, been subordinated to the Revenue Department, the Collector having been made the responsible officer in each district for the forest administration in his charge, and the Conservator having been placed more in the position of a consultative officer in technical matters.

Establishments and their recruitment.

213. The reorganization of the superior grades of the Forest Department into Imperial and Provincial Services was brought into operation from the 1st April 1892, under orders contained in Government Resolution No. 1860, dated 17th March 1892, in the Revenue Department.

214. The following is the distribution of appointments in the Central Circle at the close of the year :—

			Rs.
1	Conservator ...	... 1st grade, at	1,600
1	Deputy Conservator	... 1st do. at	900
4	Do.	... 3rd do. at	650
1	Do.	... 4th do. at	550
7	Total Imperial		

			Rs.
3	Extra Assistant Conservators	1st grade, at	350
2	Do.	3rd do. at	250
1	Do.	4th do. at	200
6	Total Provincial.		

215. The following statement shows the distribution and cost of the existing sanctioned staff of Rangers, Foresters and Forest guards in the divisions comprising the Central Circle :—

No.	Division.	Number of Ranges.	Range Forest Officers.							Forest Guards.						Total monthly cost.	Remarks.
			Rangers.				Foresters.										
			Rs. 100	Rs. 80	Rs. 60	Rs. 50	Rs. 40	Rs. 30	Rs. 20.	Rs. 15.	Rs. 12.	Rs. 10.	Rs. 9.	Rs. 8.	Rs. 7.		
1	East Khándesh...	13								8	16	20	20	40	75		The pay of Rangers and Foresters is personal, and they liable to be transferred from one range to another as the exigencies of the service may require. Consequently the number of appointments in each grade is shown in lump for the whole Circle.
2	West Khándesh...	10								7	14	18	18	50	102		
3	Násik	14								10	20	25	26	50	158		
4	Ahmednagar ...	11	1	3	5	7	17	25	22	6	12	22	22	50	85	15,159	
5	Poona	11								9	17	26	25	60	120		
6	Sátára	14								9	18	24	22	57	102		
7	Sholapur... ...	7								3	6	11	8	16	68		
	Total ...	80	1	3	5	7	17	25	22	52	103	146	141	323	7 10	15,159	

216. In addition to the above, the following temporary establishment was in entertainment throughout the year, in the divisions of Násik and Poona, at a total monthly cost of Rs. 375 :—

Násik—3 Forest Guards at Rs. 8 each...	Poona—15 Forest Guards at Rs. 8 each.
,, 3 do. at ,, 7 ,, ...	,, 30 do. at ,, 7 ,,

217. The numerical strength and cost of the existing sanctioned office establishment of the Central Circle are exhibited in the statement given below :—

No.	Division.	Number and Gradation.											Total monthly cost.
		Clerks.								Peons.			
		Rs. 100.	Rs. 80.	Rs. 60.	Rs. 50.	Rs. 40.	Rs. 30.	Rs. 20.	Rs. 15.	Rs. 10.	Rs. 9.	Rs. 8.	
													Rs.
1	Direction	1	1	1	2	2	2	2	...	1	1	5	579
2	East Khándesh ...	...	...	...	1	...	1	2	2	...	1	3	183
3	West Khándesh ...	...	...	...	1	...	1	2	3	...	1	5	214
4	Násik	...	...	...	1	...	1	2	2	...	1	3	183
5	Ahmednagar ...	...	...	...	...	1	1	2	2	...	1	3	173
6	Poona	...	...	...	1	...	1	2	3	...	1	5	214
7	Sátára	...	...	...	1	...	1	2	3	...	1	5	214
8	Sholápur	...	...	...	...	1	1	2	1	...	1	3	158
	Total ...	1	1	1	7	4	9	16	16	1	8	32	1,918

218. Out of the total numerical strength shown against Direction, 3 clerks—one on Rs. 80, one on 40 and one on 30—and 2 peons at Rs. 8 each, have been attached to the office of the Deputy Conservator of Forests, Northern Circle, as a temporary measure.

219. In addition to the above permanent strength a temporary establishment, consisting of 1 clerk on Rs. 15 and 2 peons at Rs. 8 each, has been in entertainment in the Násik Division under the Sub-division Officer.

220. The supervision of the Divisional Forest Officers over the forest administration in their respective divisions was effective, and the general discipline was good.

In the East Khándesh Division 1 round guard and 7 beat guards and one depôt officer and one depôt peon were dismissed the service, for general misconduct and inattention to duty. One, Nathu Mairál, Depôt Officer at Dhánora, was prosecuted on a charge of criminal breach of trust, and was convicted and sentenced to 12 months' rigorous imprisonment and to pay a fine of Rs. 50.

In the West Khándesh Division one round guard was dismissed the service and one Range Forest Officer, Mirasgarali Rustumali, Forester Rs. 20 grade, of Navápur, was convicted under Section 384 of the Indian Penal Code and sentenced to six months'imprisonment.

In the Násik Division one round guard on Rs. 12, Mahádev Vishnu, is under prosecution for misappropriation of Government money ; and one Shankar Keshav Joshi on Rs. 10 has absconded, as there is a case of embezzlement against him ; 6 beat guards have resigned, and 15 have been dismissed for misconduct.

In the Ahmednagar Division, 5 beat guards were dismissed the service for allowing illicit cuttings in their beats and for neglect of duty.

In the Poona Division, 19 forest guards were dismissed the service, 15 were reduced for misconduct and irregularities. One round guard in the Mával Range, Shekh Mujáwar valad Shekh Yusaf, was prosecuted for absconding with Government money, and was sentenced to six months' rigorous imprisonment ; and one Balábhai Taskhan, forest guard, was also prosecuted for illegally levying fees for grass and grazing from villagers, and although the evidence was strong, the case fell through on technical grounds.

In the Sátára Division, 5 forest guards were dismissed the service and one resigned. One of the former, a round guard in the Mán Range, was convicted under Section 409 of the Indian Penal Code and sentenced to one year's rigorous imprisonment for criminal breach of trust.

In the Sholápur Division, 2 round guards and 12 beat guards were dismissed the service for neglect of duty.

221. The year under report was not as unhealthy as the preceding one. However, malarial fever was generally prevalent; and the following is a list of casualties in the different divisions of the Central Circle :—

No.	Division.	Deaths.
1	East Khándesh	3
2	Násik	2
3	Ahmednagar	1
4	Poona	4
5	Sátára	2
	Total ...	12

222. Mr. Madan, Extra Assistant Conservator of Forests, has held charge of the East Khándesh Division during the greater portion of the year; and the Collector has remarked, in his review of the divisional administration report: "The gross revenue is practically stationary: but the net revenue has again increased. Mr. Madan is, I think, to be congratulated on the results of the year's work; he takes an interest in his duties, and works harmoniously with other departments."

223. Mr. E. G. Oliver has been Divisional Forest Officer of West Khándesh Division throughout the year with the exception of one month, from 19th April 1893 to 19th May, while he was on privilege leave, and has administered his division in an able and efficient manner, and deserves much credit for his successful management of such a large, important and difficult charge. The Collector has recorded as follows :—

(*a*) That the forest settlement of the district is practically completed now, which, after all the uncertainty that has existed for so long, is a great relief. One cannot pass from the subject of forest settlement without mentioning the admirable way in which Mr. Dodgson has carried it out.

(*b*) That the system of tracing internal fire-paths has been a success. For, though there were more fires this year than last, the area burnt was not half so much: showing that the fires did not spread as they did last year: and it is the spreading of a fire that the paths are intended to prevent.

(*c*) That the number of cattle impounded fell off. And as Government attach a good deal of importance to this, it is satisfactory as showing that the people are beginning to understand the boundaries and to observe the rules. Rules will not be obeyed unless a penalty is attached and exacted when they are ignored. But the fact that the occasions for exacting penalties were less this year than last, is gratifying.

(*d*) That the Department seem able to meet the demand for timber and to make their handsome revenue without drawing upon the timber in Government forest at all. This is just as well, as it is not possible to bring timber down from the Akráni and other big forests at a profit. But probably when the Tápti Valley Railway is made, this will all be changed.

(*e*) That the financial results of the year have been excellent, and that this is not accidental and transient, but apparently part of a steady increase that has been going on for some years past.

224. Mr. Betham has performed his duties of Divisional Forest Office, Násik, in a very satisfactory manner as usual, and his Assistant, Mr. W. R. Gaunde, Extra Assistant Conservator, is reported to have worked well and to have given satisfaction.

225. Mr. Hornidge held charge of the Ahmednagar Division almost throughout the year, in addition to his own division of Sholápur. The Collector

of the latter district in forwarding the divisional report remarks that " Mr. Hornidge is a very industrious and conscientious officer ; " and the Conservator fully endorses this opinion.

226. The Poona Division was in charge of Mr. R. C. Wroughton from 1st April 1892 to 20th April 1892, when he was transferred to the Southern Circle as Conservator of Forests for that Circle, and was succeeded by Mr. Gleadow, who held charge up to 9th September 1892, when he was appointed a full-time Professor of Forestry at the College of Science, Poona. Mr. A. D. Wilkins then received charge of the division and held it up to the close of the year. All these officers have performed their duties satisfactorily with commendable zeal, energy and discretion, and it is also pleasing to note that Mr. J. H. Clabby, Sub-divisional Forest Officer, Poona, was of the greatest assistance to Mr. Wilkins.

227. Mr. R. S. F. Fagan was Divisional Forest Officer of Sátára throughout the year; and his Collector, Mr. Candy, in forwarding the report records that " Mr. Fagan has conducted the forest administration with singular ability and energy and rendered the Collector hearty co-operation when necessary."

Mr. Fagan reports that Mr. G. S. Hinge, who succeeded Mr. L. D. Joshi as Sub-divisional Forest Officer, Sátára, was of great assistance to him and deserves the highest commendation.

228. The subordinate officers generally both in the executive and office establishments have worked satisfactorily. A range forest officer's life is a very hard one with many and serious responsibilities, with constant calls upon his time and attention, and with little leisure to himself; and every reasonable consideration should be shown to these very useful officers, and their self-respect should be promoted by encouragement and praise when such has been fairly earned; and the Conservator has much pleasure in testifying to the good work done by, and in making special mention of, Messrs. Rámchandra Ráoji Bodvadkar and Aminuddin Alliuddin in East Khándesh, Abdul Rasul Khajbaksh in West Khándesh, Wáman Gopál Tumne and Kasamaga Mirzaaga in Násik, Dinkar Náráyan Dámle in Ahmednagar, Vishnu Mahádeo Tilak and Báláji Dhondeo Dhekne in Poona, Bálkrishna Balwant Parasnis and Keshav Pandurang Kavthekar in Sátára, in the executive branch; and of Messrs. Keshav Ganesh Vaidya, Madhavráo Náráyan Gokhale and Krishnáji Vyankatesh Lohokre, in the Conservator's Office, and Tukárám Vithoba Sonár, Dámodar Tukárám Salsingikar, Mádhavráo Dáji Joshi, Ganesh Náráyan Kavthekar, Trimbak Govind Mahájan, Gangádhar Chintáman Kále, and Vishnu Anant Bápat, in the Divisional Forest Offices, in the clerical branch.

Forest Instruction, &c.

229. As regards the working of the forest classes attached to the College of Science, Poona, the Principal of the College states that there are 25 candidates on the roll. The Conservator of Forests, Northern Circle (old), sent 4 candidates, the Conservator, Southern Circle, sent 4, and the Conservator, Sind Circle, sent 1 candidate only. At the final examination held in September 1892, 7 candidates appeared, of whom 6 passed the examination, Mr. F. Gleadow, Deputy Conservator of Forests, 3rd Grade, was appointed a full-time Professor of Forestry to the College from the 11th September 1892, and has been in charge of the classes ever since.

GENERAL REMARKS.

Imports and Exports of Forest Produce.

230. In the two forest divisions of Khándesh alone, in the Central Circle, is duty on foreign timber levied, while the exports of the Collectorate consist, for the main part, of Rosha oil (Andropogon schœnanthus) which goes to Bombay, and from there the best sort is exported to Europe. Teak (Tectona grandis) is also exported, to a small extent, from Khándesh down the Tápti river to the markets in the Baroda State.

231. The duty on foreign timber collected this year amounts to Rs. 36,910 against Rs. 23,587 in the year preceding, the reason of increase being that the year under report represents the results of 15 months, and consequently the receipts during the additional three months, during which brisk timber trade is generally carried on, have augmented the revenue.

232. On the 1st April 1892, *i.e.* at the beginning of the year under report, the Conservator's camp was in the Thána districts, and after examining the forests and forest operations going on in the different ranges of that division up to 6th May, the Conservator moved camp into the Poona District and stationed at Khandála up to the end of the month, when the rains set in, and he then came to Poona, the head-quarters station.

233. Before setting out into the districts the Conservator went to Sátára early in November, examined the office and records of the Divisional Forest Officer there, and then moved camp into the Poona districts. During the remaining period of November and in December the Conservator inspected the bábul forests and hill lands in the divisions of Poona and Sholápur. Mr. Wilkins, the Divisional Forest Officer, Poona, joined the Conservator in the Dhond Range on the 23rd November, and in company with him most of the bábul reserves in the Dhond and Indápur ranges were visited. After examining the office and records of the Divisional Forest Officer, Poona, the Conservator moved camp into the Sholápur Division, by the 15th of December, and up to the Christmas vacation inspected the riparian bábul reserves in the Karmála range.

234. After Christmas the office opened at Záre in the Karmála Range, where the Conservator was joined by Mr. Hornidge, the Divisional Forest Officer of Sholápur, and after examining the forests of that range in company with him, the Conservator encamped at Aljápur on the banks of the river Sina, which forms the borders of the Sholápur and Ahmednagar divisions, and examined both the Divisional Forest Offices of Sholápur and Ahmednagar, as Mr. Hornidge had the charge of the latter also in addition to his own. He then entered into the Jámkhed Táluka of the Ahmednagar Division, and passing through Shevgaon, Nevása, Ráhuri and Kapargaon ranges the Conservator moved into the Násik Division, and encamped at Bokta in the Yeola Range on the 11th February 1893.

235. Passing through the Yeola and Nándgoan ranges of the Násik Division the Conservator pitched camp at Nándgaon, and from there he proceeded to Poona by order of Government, in order to accompany the Inspector-General of Forests, through some portion of the forests in the eastern tálukas of the Poona District, and was with him up to the end of February, when the Inspector-General of Forests went into the Madras Presidency, and the Conservator then returned back to his office camp at Chálisgaon in the East Khándesh Division,

236. The Conservator then marched through the Chálisgaon and Jalgaon ranges into the Erandol Range, where he was met by Mr. Madan, the Divisional Forest Officer of that division. The office and records of that officer were examined, and the Conservator then marched through the Amalner Range to Dhulia, where he was met by Mr. Oliver, the Divisional Forest Officer of West Khándesh. The office and records of this division were examined, and the Conservator then passed through the Dhulia Range into the Málegaon Range of the Násik Division and encamped at Manmád on the 25th March. From Manmád the Conservator went to Násik, examined the office and records of the Divisional Forest Officer there and closed office for the Easter vacation on the 29th of that month.

237. During the vacation the office camp moved from Manmád to Igatpuri, and the office opened there on the 5th April 1893. Mr. W. G. Betham, Divisional Forest Officer, Násik, joined the Conservator at this camp, and the forests of that range were inspected. The Conservator then moved camp into the Akola Táluka of the Ahmednagar Division, and parting from his office camp at Waki with instructions to proceed by cart-road into the Junnar Táluka of the Poona division *viâ* Rájur, Kotul and Bráhmanváda, the Conservator walked over the hilly country of the Akola ghâts bodering the Syhádris inspecting the forests and hirda depôts, and he joined the office camp at Náráyangaon in the Junnar Range; from thence he marched to Ghoda in the A'mbegaon Range, and once more

leaving the office camp there with instructions to go to Khed along cart-roads, he proceeded to Bhimáshankar through the evergreen forests to visit the scene of an extensive destruction of reserved forests which was made for the purpose of dalhi cultivation in the villages of Nigdale, Kondval and Terungaon in the Ambegaon Range during the months of April and May 1892.

238. The Conservator then directed the office camp to be moved from Khed to Poona, while he marched along the ghâts to Kárkála, and then took rail to Poona, and went from thence to Mahábaleshvar in May, and encamped there up to the 10th of June: and then returned to Poona for the rainy season; and at the end of the forest year, *i.e.* on the 30th June 1893, the Conservator was in Poona.

239. The Conservator has finally much pleasure in acknowledging the cordial support and assistance which he received from Mr. J. F. Fleet, I.C.S., Commissioner, C.D., under whose orders he has served, and from all the Collectors of the several forest divisions comprising the Central Circle; there has been perfect harmony and good-will, and forest interests have prospered generally.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

Camp Ahmednagar,
8th January 1894.

FORM No. 46.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Area of Reserved Forests, 1892-93.

Division.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
				Sq.m. a.				Sq.m. a.		
East Khándesh	Khándesh ...		506,375	791 135	(a) 4,188	(b) 968	509,595	796 155	(a) Nos. 841 31-1-93, 4219A 16-5-92, 5871 19-7-92. (b) No. 8015 10-10-92.	
West Khándesh....			705,775	1,102 495	(c) 2,195	(d) 2,236	705,734	1,102 454	(c) Nos. 4219A 16-5-92, 7672 27-9-92. (d) Nos. 8756 7-11-92, 522 19-1-93, 82 5-1-93.	
Násik	Násik ...		818,499	1,278 579	(e) 194	(f) 4	818,689	1,279 129	(e) Nos. 3081 29-3-92, 5927 20-8-92, 2904 24-4-93. (f) Nos. 6608 17-8-92, 8544 31-10-92, 4235 13-6-93.	
Ahmednagar ...	Ahmednagar ...		533,666	833 546	(g) 521	(h) 116	534,071	834 311	(g) No. 3820 2-5-92. (h) Nos. 1857 & 1867 & 68 13-3-93, 9509 5-12-92. 3139 2-5-93, 6779 23-8-92.	
Poona	Poona		475,742	743 222	...	(i) 1,274	474,468	741 228	(i) Nos. 6610 17-8-92, 6902 30-8-92, 8068 11-10-92.	
Sátára	Sátára		437,965	684 205	(j) 6,014	(k) 1,253	442,726	691 486	(j) Nos. 200 6-1-93, 4086 5-6-93, 5883 21-7-92. (k) Nos. 2897 24-4-93, 3977 25-5-93, 6329 5-8-92. 8757 & 58 7-11-92, 6254 3-8-92, 3160 4-5-93, 3773 23-5-93, 1768 8-3-93, 2263 28-3-93, 4260 15-6-93, 7283 14-9-92, 8014 30-10-92, 4021 9-5-92, 842 31-1-93, 4028 9-5-92, 6329 5-8-92, 8069 11-10-92, 7695 28-9-92.	
Sholápur	Sholápur ...		177,623	277 343	(l) 272	(m) 2	177,893	277 613	(l) Nos. 1952 16-3-92, 3286 6-5-93, 3387 13-4-92. (m) Nos. 2927 25-4-93, 4012 2-6-93.	
			3,655,645	5,711 605	13,384	5,853	3,663,176	5,723 456		

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 46 A.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Area of Protected Forests, 1892-93.

Division.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
				Sq.m. a.				Sq.m. a.		
East Khándesh ...	Khándesh ...		...	...	...	...	...	...		
West Khándesh ...			113,715	177 435	...	...	113,715	177 435		
Násik	Násik		...	...	...	...	...	...		
Ahmednagar ...	Ahmednagar ...		7,337	11 297	...	173	7,164	11 124	No. 2398 / 10-1-93	
Poona	Poona		...	...	...	...	...	...		
Sátára	Sátára		648	1 8	...	4	644	1 4	No. 3601 / 23-4-92	
Sholápur	Sholápur ...		...	...	...	...	...	...		
		Total ...	121,700	190 100	...	177	121,523	189 563		

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 47.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Statement showing the Progress made in, and the Expenditure incurred on, Forest Settlements during 1892-93.

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	AREAS FINALLY SETTLED DURING THE YEAR.					AREAS UNDERGOING SETTLEMENT.						REMARKS.
			Number and date of Government order according final sanction to the settlement.	Name of Forest settled.	Area, in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing Settlement.		
						In Forest accounts.	In other accounts.		Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In Forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		Sq. Ms.				Rs.	Rs.	Rs.					Rs.	Rs.	
Reserved.															
East Khándesh ..	Khándesh ...	791	4219A 16-5-92. 5871 19-7-92. 841 of 31-1-93.	...	7	...	...	...	...	7	...	11	7,092	9,246	Expenditure incurred on areas finally settled and undergoing settlement cannot be shown separately and has therefore been entered in lump in columns 14 and 15 for reserved and protected forests.
West Khándesh ...		1,103	4219A 16-6-92. 7672 27-9-92.	...	3	...	...	...	...	160	...	32			
Násik	Násik	1,279	3081 29-3-92 5927 20-8-92. 2904 24-4-93.	...	97/320	...	...	...	...	...	...	99/320	...	...	
Ahmednagar ...	Ahmednagar ...	834	3820 2-5-92.	...	521/640	...	...	...	...	1	...	15/32	855	...	
Poona	Poona	743	.....	...	...	...	...	...	...	3	...	2	2,485	...	
Sátára	Sátára	684	200 of 6-1-93. 2897 of 24-4-93. 4086 of 5-6-93. 3977 of 25-5-93 5882 of 21-7-92. 6329 5-8-92.	...	9	..	...	...	...	9	...	2	1,641	4,895	
Sholápur	Sholápur ...	278	1953 16-3-92. 3256 6-5-93. 3387 13-4-92.	...	272/640	...	...	...	...	93/640	...	71/320	...	...	
		5,712	... ..	...	21	...	...	...	...	180	...	48	12,073	14,141	
Protected.															
West Khándesh ...		178	.....	...	...	...	...	...	...	261	...	219	...	...	
Ahmednagar ...		11	.....	...	...	...	...	...	...	...	...	...	...	...	
Sátára		1	.. ...	...	...	...	...	...	...	...	...	...	...	...	
		190	.....	...	...	...	...	...	...	261	...	219	...	...	

A. T. SHUTTLEWORTH,
Conservator of Forests, Northern Circle.

Poona, 1st November 1893.

827—14 cc

FORM No. 48.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Record of Demarcation and Maintenance of Boundaries, 1892-93.

Division.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries not demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on Demarcation during the year.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.	
East Khándesh	4	439	...	443	...	...	443	4	54	
West Khándesh	451	522	1,091	2,064	...	26	2,090	1,978	...	
Násik	319	378	1,521	2,218	...	318	2,536	2,776	1,153	
Ahmednagar	117	600	...	717	...	...	717	1,171	...	
Poona	178	...	1,646	1,824	...	...	1,824	1,846	...	
Sátára	528	71	305	904	...	200	1,104	1,583	...	
Sholápur	133	45	642	820	...	...	820	517	...	
Total ...	1,730	2,055	5,205	8,990	...	544	9,534	9,875	1,207	

N.B.—Boundaries include, beside the outer perimeter, the limits of enclosures of private or other lands within the forests, but not the limits of sub-divisions, such as blocks, compartments, coupes.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 49.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Statement of Forest Areas surveyed and under Survey during the year 1892-93.

Division.	Areas surveyed and under survey during the year.																						Areas remaining to be taken under Survey.	Total Forest area at end of tht year, as per Form No. 46.	COST.			Remarks.
	Special surveys—Maps on 4" scale or over, by Survey of India Department or Forest Survey Branch.								*Ordinary, included in District Surveys.*								*Chain and compass or other surveys by local officers.*											
	WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.							
	WITH DETAILS OF GROWING STOCK.		WITHOUT DETAILS OF GROWING STOCK.		Total Cost.	Previous.	Of the year.	Total Cost.	WITH DETAILS OF GROWING STOCK.		WITHOUT DETAILS OF GROWING STOCK.		Total Cost.	Previous.	Of the year.	Total Cost.	4-INCH OR OVER.		UNDER 4-INCH.		Total Cost.	Previous.	Of the year.	Total Cost.			Previous.	Of the year.	Entire cost of all Surveys to end of the year.	
	Previous.	Of the year.	Previous.	Of the year.					Previous.	Of the year.	Previous.	Of the year.					Previous.	Of the year.	Previous.	Of the year.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Reserved.			Sq. m.	Sq. m.	Rs.																				Sq. m.	Sq. m.	Rs.	Rs.	Rs.	
East Khándesh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	796	796	...	...	...	
West Do.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,103	1,103	...	...	...	
Násik	...	...	234	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,045	1,279	11,714	...	11,714	
Ahmednagar	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	820	835	2,884	...	2,884	
Poona	...	...	426	124	22,555	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	291	741	31,135	22,555	53,690	
Sátára	...	...	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	616	692	5,504	...	5,504	
Sholápur	...	...	24	6*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	248	278	4,578	...	4,578	* Cost included in Poona.
Total	...	...	775	130	22,555	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,819	5,724	55,815	22,555	78,370	
Protected.																														
West Khándesh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	178	178	...	...	...	
Ahmednagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	11	...	...	...	
Sátára	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	190	190	...	...	...	

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 50.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Progress made in Working-Plans, 1892-93.

Division.	AREAS FOR WHICH WORKING-PLANS HAVE BEEN COMPLETED.		AREAS FOR WHICH WORKING-PLANS ARE BEING COMPILED.		Areas for which Working-Plans have still to be taken in hand.	Total Forest area, as in Form No. 46.	Entire cost per square mile, of Working-Plans completed.	REMARKS.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.				
1	2	3	4	5	6	7	8	9
Reserved Forests.	Sq. m.	Sq. m.	Sq.m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
East Khándesh	.....	.....	.....	.....	796	796	.....	
West Khándesh	.....	.....	.....	.....	1,103	1,103	.....	
Násik	118	49	.....	327	785	1,279	.....	
Ahmednagar	.....	.....	.....	.....	835	835	.....	
Poona	14	.....	.....	148	579	741	.....	
Sátára...	.....	.....	.....	.....	692	692	.....	
Sholápur	132	66	80	.....	.....	278	.....	
Total ...	264	115	80	475	4,790	5,724	.....	
Protected Forests.								
West Khándesh	.....	.....	.....	.....	178	178	.....	
Ahmednagar	.....	.....	.....	.....	11	11	.....	
Sátára	.....	.....	.....	.....	1	1	.....	
Total ...	.....	.....	.....	.....	190	190	.....	

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 51.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Communications and Buildings during 1892-93.

Division.	NEW WORK UNDERTAKEN DURING THE YEAR.						REPAIRS EXECUTED DURING THE YEAR.						REMARKS.
	Buildings.		Roads and Paths.			Total Expenditure on new Work.	Buildings.		Roads and Paths.			Total Expenditure on Repairs.	
	Description of Building.	Expenditure incurred.	Road or Path and object of the same.	Length of Road or Path.	Expenditure incurred.		Nature of Repairs.	Expenditure incurred.	Nature of Repairs.	Length repaired.	Expenditure incurred.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.	
East Khándesh	31 huts	345	.....	...	...	345	Tile turning, mud plastering to walls and replacing rotten posts and rafters, &c., of 3 huts and 3 depôt houses.	28	.....	...	...	28	
	1 depôt house ...	20	.....	...	...	20							
	Total ...	365	.....	...	...	365	.....	28	.....	...	...	28	
West Khándesh	9 huts in the Division and 1 rest-house at Laling in Dhulia Range (partly constructed).	996	.....	...	...	996	Repairing walls, making compounds and roofing 87 huts and 7 depôts in the Division.	564	Repairing Kalumbari road (20 feet wide) so as to allow the dealers to remove produce of felling at Ubhand.	1	7	571	
	Total ...	996	.....	...	...	996	.....	564	.....	1	7	571	
Násik	3 huts of Forest guards.	15	.....	...	...	15	Repairing 94 huts of Forest guards.	110	.....	...	...	110	
	Total ...	15	.....	...	...	15	.....	110	.....	...	...	11	
Ahmednagar ...	.....	...	.....	...	...	...	.....	...	.....	...	...	...	
Poona	4 Forest guards' huts, &c., (partly constructed).	28	.....	...	...	28	.....	...	.....	...	...	...	
	Total ...	28	.....	...	...	28	.....	...	.....	...	...	...	
Sátára	...	...	.....	...	...	...	Repairing huts of Forest guards, &c.	98	.....	...	...	98	
	Total ...	...	.....	...	...	...	.....	98	.....	...	...	98	
Sholápur ...	.....	...	.....	...	...	...	Petty repairs, &c..	2	.....	...	...	2	
	Total ...	...	.....	...	...	...	.....	2	.....	...	...	2	
	Grand Total ...	1,404	.....	...	...	1,404	.....	802	.....	1	7	809	

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 52.

Forest Department, Bombay, Central Circle.

Register of Breaches of Forest Rules during 1892-93.

Forest Division.		Cases pending from 1891-92.	New Cases of the Year.					Total Cases.	Disposed of during the Year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
East Khándesh	A	9	14	17	18	20	69	78	56	101	15	39	71	140	7
	B	...	3	219	322	163	707	707	666	1,168	...	...	666	1,168	...
	C	...	19	9	...	1	29	...	...	...	...	...	...	...	...
	Total	9	36	245	340	184	805	785	722	1,269	15	39	737	1,308	7
West Khándesh	A	5	31	37	1	14	83	88	67	140	13	29	80	169	8
	B	...	1	196	361	17	575	575	575	1,713	...	...	575	1,713	...
	C	...	133	55	21	...	209	...	...	...	...	...	...	...	...
	Total	5	165	288	383	31	867	663	642	1,853	13	29	655	1,882	8
Násik ...	A	18	3	48	47	37	135	153	94	246	42	119	136	365	17
	B	165	52	505	955	74	1,586	1,751	1,063	4,349	...	...	1,063	4,349	159
	C	...	127	67	25	6	225	...	...	...	...	...	...	...	...
	Total	183	182	620	1,027	117	1,946	1,904	1,157	4,595	42	119	1,199	4,714	176
Ahmednagar	A	14	...	38	116	29	183	197	151	346	37	64	188	410	9
	B	569	...	144	2,273	8	2,425	2,994	2,760	6,767	...	...	2,760	6,767	234
	C	...	...	79	354	14	447	...	...	...	...	...	...	...	...
	Total	583	...	251	2,743	51	3,055	3,191	2,911	7,113	37	64	2,948	7,177	243

FORM No. 52—*continued.*

Forest Division.		Cases pending from 1891-92.	New Cases of the Year.					Total cases.	Disposed of during the Year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
Poona ...	A ...	9	7	171	321	145	644	653	417	1,135	201	735	618	1,870	35
	B ...	...	24	655	2,372	73	3,124	3,124	2,277	5,853	...	...	2,277	5,853	...
	C ...	...	109	139	48	...	296	...	...	...	...	...	...	...	...
	Total ...	9	140	965	2,741	218	4,064	3,777	2,694	6,988	201	735	2,895	7,723	35
Sátára ...	A ...	17	15	72	64	77	228	245	146	307	60	195	206	502	39
	B ...	264	26	262	251	57	596	860	741	1,977	...	...	741	1,977	119
	C ...	...	48	127	284	13	472	...	...	...	...	...	...	...	...
	Total ...	281	89	461	599	147	1,296	1,105	887	2,284	60	195	947	2,479	158
Sholápur ...	A ...	13	...	5	73	19	97	110	78	161	25	86	103	247	7
	B ...	428	...	...	1,137	...	1,137	1,565	1,565	3,727	...	...	1,565	3,727	...
	C ...	...	15	...	...	...	15	...	...	...	...	...	...	...	...
	Total ...	441	15	5	1,210	19	1,249	1,675	1,643	3,888	25	86	1,668	3,974	7
Grand Total ...	A ...	85	70	388	640	341	1,439	1,524	1,009	2,436	393	1,267	1,402	3,703	122
	B ...	1,426	106	1,981	7,671	392	10,150	11,576	9,647	25,554	...	...	9,647	25,554	512
	C ...	...	451	476	732	34	1,693	...	...	...	...	...	...	...	...

N.B.—A means cases taken into Court.
B means cases disposed of under Section 67 of Indian Forest Act, 1878.
C means undetected cases.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 53.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Area of Forest Tracts Protected from Fire during 1892-93.

Division.	Forest Tracts.	Year in which protection commenced.	Area protected during 1891-92.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	REMARKS.
1	2	3	4	5	6	7	8	9
			Acres.	Acres.	Acres.	Acres.	Rs.	
East Khándesh ...	Amalner	1878-79 ...	19,260	19,950	325	19,625	..	
	Páchora...	,, ...	29,433	28,465	2	28,463	10	
	Bhadgaon							
	Bhusával	,, ...	64,065	65,942	3,657	62,285	...	
	Edlabád	,, ...	59,418	60,319	451	59,868	51	
	Chálisgaon	,, ...	105,836	107,668	9,059	98,609	81	
	Chopda	,, ..	16,410	16,675	...	16,675	...	
	Erandol	,, ...	19,750	21,440	184	21,256	4	
	Jalgaon	,, ...	40,717	41,592	395	41,197	25	
	Jámner	,, ...	122,141	154,264	34,715	119,549	110	
	Ráver							
	Sávda							
	Yával							
	Total ...	...	477,030	516,315	48,788	467.527	281	
West Khándesh ...	Dhulia	1878-79 ...	130,184	131,192	9,000	122,192	38	
	Nandurbár	,, ...	31,035	131,242	65,000	66,242	153	
	Navápur							
	Pimpalner	,, ...	165,363	212,298	55,000	157,29	255	
	Nizámpur							
	Sháhada	,, ...	5,676	85,680	28,000	57,6	47	
	Shirpur	,, ...	27,159	206,148	70,000	136,1	202	
	Sindkhed	,, ...	24,912	24,916	1,000	23,916	45	
	Taloda	,, ...	64,984	284,660	60,000	224,660	164	
	Akráni							
	Total ...	...	449,313	1,076,136	288,000	788,136	904	
Násik	Násik	1878-79 ...	42,062	43,970	343	43,627	20	
	Igatpuri	,, ...	53,282	53,976	153	53,823	15	
	Sinnar	,, ...	35,330	35,370	392	34,978	...	
	Dindori...	,, ...	53,896	55,575	1,431	54,144	11	
	Niphád	,, ...	3,445	3,446	52	3,394	...	
	Chándor	,, ...	24,866	24,898	242	24,656	...	
	Yeola	,, ...	31,494	31,541	219	31,322	15	
	Báglán	,, ...	119,671	1,24,167	2,772	121,395	4	
	Kalvan	,, ...	107,185	1,09,361	726	108,635	50	
	Peint	,, ...	107,111	1,07,218	116	107,102	1	
	Malegaon	,, ..	121,689	1,22,054	542	121,512	1	
	Nándgaon	,, ...	107,147	1,07,311	882	106,429	49	
	Total ...	...	807,178	818,887	7,870	811,017	166	
Ahmednagar ...	Nagar	1878-79 ...	40,463	40,493	1,159	39,334	...	
	Parner	,, ...	63,992	64,122	229	63,893	...	
	Shrigonda	,, ...	44,557	44,550	16	44,534	...	
	Karjat	,, ...	50,152	50,149	450	49,699	...	
	Jamkhed	,, ...	40,046	39,961	160	39,801	...	
	Shevgaon	,, ...	26,597	26,655	161	26,494	...	
	Nevása	,, ...	19,719	19,765	70	19,695	...	
	Ráhuri	,, ...	48,888	48,920	105	48,815	...	
	Kopargaon	,, ...	9,084	9,109	...	9,109	...	
	Sangamner	,, ...	86,665	86,732	22	86,710	...	
	Akola	,, ...	110,987	111,358	526	110,832	...	
	Total ...	...	541,150	541,814	2,898	538,916	...	
Poona	Junnar	1878-79 ...	60,613	61,946	1,415	60,531	4	
	Indápur	,, ...	62,745	61,494	14	61,480	...	
	Khed	,, ...	55,709	56,753	1,602	55,151	4	
	Ámbegaon	,, ...	44,128	44,171	307	43,864	...	
	Sirúr	,, ...	20,753	20,795	104	20,691	...	
	Purandhar	,, ...	25,699	25,827	282	25,545	...	
	Bhimthadi	,, ...	19,379	19,379	9	19,370	...	
	Dhond	,, ...	52,258	52,413	17	52,396	...	
	Haveli	,, ...	49,865	50,434	519	49,915	...	
	Mulshi	,, ...	27,970	28,361	883	27,478	...	
	Mával	,, ...	53,721	54,596	1,148	53,448	...	
	Total ...	.....	472,840	476,169	6,300	469,869	8	

FORM No. 53—*continued.*

Division.	Forest Tracts.	Year in which protection commenced.	Area protected during 1891-92.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9
			Acres.	Acres.	Acres.	Acres.	Rs.	
Sátára	Mahábaleshvar ...	1878-79 ...	41,370	41,389	729	40,660	6	
	Mán	,, ...	56,270	56,105	48	56,057	...	
	Khatáv	,, ...	20,176	20,887	2	20,885	...	
	Karád	,, ...	35,971	35,973	9	35,964	...	
	Wái	,, ...	24,892	24,843	16	24,827	...	
	Koregaon	,, ...	28,772	28,138	3	28,135	...	
	Sátára	,, ...	22,128	22,314	194	22,120	...	
	Tásgaon	,, ...	20,005	20,101	...	20,101	...	
	Khandála	,, ...	14,189	14,189	60	14,129	...	
	Jávli	,, ...	50,717	51,112	170	50,942	...	
	Khánápur	,, ...	32,083	36,850	9	36,841	...	
	Válva	,, ...	28,186	28,932	293	28,639	...	
	Shirála							
	Pátan	,, ...	62,932	64,011	524	63,487	...	
	Total ...	...	437,691	444,844	2,057	442,787	6	
Sholápur	Sholápur	1878-79 ...	38,542	38,554	67	38,487	...	
	Bársi	,, ...	8,403	8,536	2	8,534	...	
	Mádhe	,, ...	31,417	31,477	332	31,145	...	
	Karmála	,, ...	51,050	51,242	457	50,785	...	
	Pandharpur	,, ...	6,109	6,192	...	6,192	...	
	Sángola	,, ...	20,528	20,589	...	20,589	...	
	Málsiras	,, ...	21,445	21,445	2	21,443	...	
	Total ...	...	177,494	178,035	860	177,175	...	
	Grand Total ...	...	3,362,696	4,052,200	356,773	3,695,427	1,365	

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

Poona, 1st November 1893.

FORM No. 54.

Forest Department, Bombay, Central Circle.

Area closed and open to Grazing during 1892-93.

Division.	Area in Square Miles.						Remarks.
	Closed to all animals.		Closed to browsers (camels, goats or sheep).		Open to all animals.	Total area.	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
1	2	3	4	5	6	7	8
Reserved Forests.							
East Khándesh	60	...	736	...	...	796	Areas entered in column 4 are open to cattle of the bovine species during a portion of the year,—that is, during the grazing season.
West "	365	...	738	...	...	1,103	
Násik	468	...	811	...	...	1,279	
Ahmednagar	369	124	342	...	...	835	
Poona	397	316	28	...	...	741	
Sátára	181	...	511	...	...	692	
Sholápur	182	...	96	...	...	278	
Total ...	2,022	440	3,262	...	...	5,724	
Protected Forests.							
West Khándesh	...	...	178	...	...	178	
Ahmednagar	...	11	...	...	...	11	
Sátára	...	...	1	...	...	1	
Total ...	...	11	179	...	...	190	

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

B 827—16 CC

FORM No. 55.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Return of Grazing in the State Forests during 1892-93.

Division.	GRAZING ON PAYMENT—NUMBER OF ANIMALS.													GRAZING FREE—NUMBER OF ANIMALS.										Total value of Fees at full rates.	Grand total of value at full rates.
	AT FULL RATES.						AT PRIVILEGED RATES.							BY RIGHT UNDER SETTLEMENT.						DURING PLEASURE OF GOVERNMENT, OR OTHERWISH THAN UNDER SETTLEMENT.							
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals	Fees received.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of Fees at full rates.	Buffaloes.	Cows. and Bullocks.	Goats and Sheep.	Camels.	Other animals	Value of Fees at full rates.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
						Rs.						Rs.	Rs.						Rs.						Rs.	Rs.	Rs.
East Khandesh	3,422	17,571	34,951	...	595	17,806	19,413	114,701	1,104	...	14	38,452	76,905	1,452	7,339	...	...	107	5,175	...	...	...	...	...	...	5,175	99,886
West Khándesh	11,193	33,929	237,257	...	308	28,549	5,891	92,182	1,240	...	5,465	...	55,382	2,513	21,895	118	...	336	5,574	...	...	...	...	...	...	5,574	89,505
Násik	4,058	112,629	55,370	...	539	43,109	32	220	...	...	...	30	71	...	...	...	...	...	...	5,663	37,324	4,592	...	1,973	13,286	13,286	56,466
Ahmednagar ...	987	3,333	3,885	...	48	3,419	4,272	99,389	50,776	...	280	30,231	60,462	...	...	...	...	...	...	1,050	8,043	...	...	...	3,265	3,265	67,146
Poona	394	2,149	12,299	...	12	3,031	1,487	15,814	58,337	...	138	8,519	17,038	...	...	...	...	...	...	13,473	91,712	...	...	3	60,548	60,548	80,617
Sátára	851	1,288	3,743	...	917	2,074	840	6,376	56,330	...	6,413	6,637	13,273	...	...	...	...	...	...	...	290,419	...	...	...	1,50,046	1,50,046	1,65,393
Sholápur ...	130	322	...	...	...	291	1,833	24,262	...	...	33	6,990	13,980	...	...	...	...	...	...	...	...	...	...	11,383	2,416	2,416	16,687
Total ...	21,035	171,721	347,505	...	2,419	98,279	33,768	352,944	167,787	...	12,343	90,859	2,37,111	3,965	29,234	118	...	443	10,749	20,186	427,498	4,592	...	13,359	2,29,561	2,40,310	5,75,700

Poona, 1st November 18

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 56.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Area of Plantations, 1892-93.

Division.	Name of Plantation	Area in Acres. On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	Receipts. Of the year.	Charges. Of the year.	Remarks.
1	2	3	4	5	6	7	8	9
	Regular Plantations.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	
East Khándesh ...	*Nil*	...	...	...	...	...	...	
West Khándesh .	Dhulia	15	11	...	26	...	209	
	Pimpalner	2	...	...	2	...	45	
	Total ...	17	11	...	28	...	254	
Násik	Sátpur	...	31	...	31	...	87	
	Páthardi	...	17	...	17	...	106	
	Násik Gangákáth	...	12	...	12	...	95	
	Sawandgaon...	...	70	...	70	...	5	
	Total ...	...	130	...	130	..	293	
Ahmednagar ...	Dongargan	142	...	...	142	...	...	
Poona	Junnar	66	248	...	314	...	199	
	Khed...	2	...	...	2	...	...	
	Haveli	22	202	...	224	...	506	
	Bhimthadi	26	152	...	178	...	215	
	Dhond	74	224	...	298	...	567	
	Indapur	179	428	...	607	...	789	
	Sirúr	39	183	...	222	...	264	
	Mával	...	15	...	15	...	7	
	A'mbegaon	...	380	...	380	...	55	
	Total ...	408	1,832	...	2,240	...	2,602	
Sátára	Khatáv	287	25	...	312	...	145	
	Koregaon	248	6	...	254	...	172	
	Karad	282	25	...	307	...	195	
	Khandála	103	19	...	122	...	65	
	Válva...	80	22	...	102	...	14	
	Sátára	75	33	...	108	...	174	
	Wái	245	19	...	264	...	150	
	Mán	160	5	..	165	...	100	
	Jávli	42	...	...	42	...	...	
	Mahábaleshvar	1,124	4	...	1,128	...	90	
	Tásgaon	302	2	...	304	...	22	
	Pátan	168	7	...	175	...	96	
	Khánápur	69	4	...	73	...	11	
	Shirála	26	...	...	26	...	...	
	Total ...	3,271	171	...	3,382	...	1,234	
Sholápur	*Nil*	...	...	...	...	...	...	
	Total, Regular Plantations.	3,778	2,144	...	5,922	...	4,383	
	Cultural Operations.							
East Khándesh...	Amalner	2,457	34	...	2,491	...	20	
	Bhadgaon	336	225	...	561	...	20	
	Bhusával	2,899	427	...	3,326	...	80	
	Chálisgaon	851	173	...	1,024	...	61	
	Chopda	889	459	...	1,348	...	35	
	Edalabad	1,451	1,518	...	2,969	...	56	
	Erandol	5,281	550	...	5,831	...	19	
	Jalgaon	979	166	...	1,145	...	21	
	Jámner	1,259	455	...	1,714	...	15	
	Pachora	95	111	...	206	...	70	
	Ráver	597	221	...	818	...	26	
	Sávda	1,024	200	...	1,224	...	10	
	Yával	751	11	...	762	...	14	
	Total ...	18,869	4,550	...	23,419	...	447	
West Khándesh .	Akráni	239	11	...	250	...		
	Dhulia	4,274	...	...	4,274	...		
	Nandurbár	789	25	...	814	...		
	Navápur	1,410	10	...	1,420	...	155	
	Nizámpur	505	50	...	555	...		
	Pimpalner	1,463	100	...	1,563	...		
	Sháhada.	3,477	50	...	3,527	...		
	Shirpur	1,771	20	...	1,791	...		
	Sindkhed	6,177	5	...	6,182	...		
	Taloda	1,090	20	...	1,110	...		
	Total ...	21,195	291	...	21,486	...	155	

FORM No. 56—*continued.*

Division.	Name of Plantation.	Area in Acres. On 1st April 1892.	Area in Acres. Added during the year.	Area in Acres. Excluded during the year.	Area in Acres. Area on 30th June 1893.	Receipts. Of the year.	Charges. Of the year.	Remarks.
1	2	3	4	5	6	7	8	9
	Cultural Operations—contd.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	
Násik	Násik	483	286	379	390	...	709	
	Igatpuri	416	118	70	464	...	382	
	Sinnar	495	146	201	440	...	27	
	Dindori	239	...	164	75	...	....	
	Niphád	444	204	439	209	...	667	
	Chándor	746	194	...	940	...	707	
	Peint...	120	...	60	60	...	...	
	Yeola...	2,286	...	109	2,177	...	613	
	Nándgaon	601	342	359	584	...	404	
	Málegaon	1,969	...	70	1,899	...	2	
	Báglan	632	70	429	273	...	21	
	Kalvan	228	...	...	228	...	15	
	Total ...	8,659	1,360	2,280	7,739	...	3,547	
Ahmednagar	Nagar	2,121	2,182	...	4,303	...	563	
	Párner	1,022	736	...	1,758	...	168	
	Shrigonda	2,364	2,147	...	4,511	...	429	
	Karjat	1,412	1,736	...	3,148	...	284	
	Jámkhed	2,448	900	...	3,348	...	66	
	Shevgaon	1,276	1,483	...	3,359	...	248	
	Nevása	833	960	...	1,793	...	168	
	Ráhuri	1,032	664	...	1,996	...	283	
	Kopargaon	1,216	1,103	...	2,319	...	514	
	Sangamner	4,636	3,287	...	7,923	...	215	
	Akola...	1,494	1,621	...	3,115	...	193	
	Total ...	19,854	16,819	...	36,673	...	3,131	
Poona	Junnar	1,012	146	...	1,158	...	108	
	Indápur	3,645	328	...	3,973	...	292	
	Khed...	6,188	1,250	...	7,438	...	48	
	A'mbegaon	2,299	22	...	2,321	...	41	
	Sirúr	5,883	1,195	...	7,078	...	59	
	Purandhar	5,973	111	...	6,084	...	30	
	Bhimthadi	2,114	94	...	2,208	...	176	
	Dhond	3,773	...	...	3,773	...	109	
	Haveli	1,485	681	...	2,166	...	168	
	Mulshi	849	17	...	866	...	3	
	Mával	1,119	29	...	1,148	...	...	
	Plantation by guards ...	6,784	....	...	6,784	...	..	
	Total ...	41,124	3,873	...	44,997	...	1,034	
Sátára	Jávli	10,398	5,219	...	15,617	...	109	
	Karád	21,700	5,696	...	27,396	...	9	
	Khánápur	5,761	4,468	...	10,429	...	48	
	Khandala	4,363	13	...	4,376	...	9	
	Khatáv	1,349	45	...	1,394	...	5	
	Koregaon	19,103	4,273	...	23,376	...	215	
	Mahábaleshvar	6,470	268	...	6,738	...	166	
	Mán	12,854	1,235	...	14,089	...	37	
	Pátan	6,197	442	...	6,639	...	...	
	Sátára	3,212	286	...	3,498	...	4	
	Shirála	741	3	...	744	...	17	
	Tásgaon	1,374	...	...	1,374	...	...	
	Wái	18,137	398	...	18,535	...	16	
	Válva	4,491	967	...	5,458	...	73	
	Total ...	116,150	23,513	...	139,663	...	708	
Sholápur... ...	Sholápur	4,887	1,006	...	5,893	...		
	Barsi	2,866	1,260	...	4,126	...		
	Mádha	9,958	706	...	10,664	...		
	Karmála	9,586	38,679	...	48,265	...	805	
	Pandharpur	4,628	1,268	...	5,896	..		
	Sangola	7,996	66	...	8,062	...		
	Malsiras	23.298	2,036	...	25,334	...		
	Total ...	63,219	45,021	...	108,240	...	805	
	Total, Cultural Operations.	289,070	95,427	2,280	382,217	...	9,827	
	Add—Total Regular Plantations	3,778	2,144	...	5,922	...	4,383	
	Grand Total ...	292,848	97,571	2,280	388,139	...	14,210	

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

Poona, 1st November 1893.

B 827—17 cc

FORM No. 57.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Outturn (in cubic feet, solid) of Timber and Fuel during the year 1892-93, and Agency of Exploitation.

Division.	Timber in the rough; Logs.					Timber in the rough; Poles.					Sawn or Squared Timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	C. ft.	C. ft.			C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.						C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
East Khándesh ...	...	255,105	...	...	255,105	18,740	...	...	...	18,740	...	...	...	...	...	...	Bamboos No. 1,131,212	.....	...	Bamboos No. 1,131,212	1,022,985	1,299,200	...	...	2,322,185	2,596,030 Bamboos No. 1,131,212
West Khándesh ...	36,891	51,030	...	...	87,921	88,281	101,135	...	...	189,416	...	...	...	...	...	15,853	6,024 Bamboos No. 131,253	900	50,000	72,777 Bamboos No. 131,253	431,766	167,900	...	2,500,000	3,099,666	3,449,780 Bamboos No. 131,253
Násik	...	...	...	...	...	15,894	567,469	19,988	...	603,351	...	...	...	...	...	...	72 Bamboos No. 266,637 Cart loads 585	Bamboos 75	...	72 Bamboos No. 266,712 Cart loads 585	129,463	331,704	225	...	461,392	1,064,815 Bamboos No. 266,712 Bamboo cart-loads 585
Ahmednagar ...	...	...	...	...	...	64,514	...	...	...	64,514	...	...	...	...	...	...	Bamboos 46,578	.....	..	Bamboos No. 46,578	111,614	81,843	...	...	193,457	257,971 Bamboos No. 46,578
Poona..	...	...	...	...	...	61,638	1,413	1,662	...	64,713	...	...	...	...	...	...	Bamboos 142,151	.....	...	Bamboos No. 142,151	45,365.	184,543	...	...	229,908	294,621 Bamboos No. 142,151
Sátára	...	...	...	...	...	13,545	25,023	544	...	39,112	...	...	...	...	...	...	Bamboos 53,416 Head loads 9	.....	...	Bamboos No. 53,416 Head loads 9	376,341	20,596	...	...	396.937	436,049 Bamboos No. 53,416 9 head loads
Sholápur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	302	.....	...	302	18,735	1,585	...	...	20,320	20,622
Total ...	36,891	306,135	...	...	343,026	262,612	695,040	22,194	...	979,846	...	...	...	...	...	15,853	6,398 Bamboos No. 1,771,247 585 cart-loads 9 head loads	900 Bamboos No. 75	50,000	73,151 Bamboos No. 1,771,322 585 cart-loads 9 head loads.	2,136,269	2,987,371	225	2,500,000	6,723,865	8,119,888 Bamboos No. 1,771,322 Bamboo cart-loads 585 Bamboo head-loads 9.

Charcoal should be shown by its equivalent in fuel, the quantity of wood consumed in producing it being entered in cubic feet, solid.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

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FORM No. 58.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Outturn of Minor Forest Produce.

	Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
		By Government Agents.		By Purchasers.		By Free Grantees.		By Right Holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	2	3	4	5	6	7	8	9	10	11	12
			Rs.		Rs.		Rs.		Rs.		Rs.
East Khandesh.	Stone ... ... Cart-loads.	.....	...	4,316	635	...	...	...	...	4,316	635
	Do. ... ... Cubic feet.	.....	...	219,216	549	...	...	...	...	219,216	549
	Thorns ... ... Cart-loads	.....	...	3,486	222	...	...	...	...	3,486	223
	Manure ... ... Do.	.....	...	147	142	...	...	...	...	147	142
	Anjan leaves ... Do.	.....	...	10	3	...	...	...	...	10	3
	Do. ... Head-loads	.....	...	124	8	...	...	...	...	124	8
	Rosha oil stills ... No.	.....	...	6	100	...	...	...	...	6	100
	Mango fruits	.....	...	.....	6	...	...	...	...	.....	6
	Grass and grazing	.....	...	.....	75,173	...	...	...	...	.....	75,173
	Total ...	.....	...	.....	76,838	...	...	...	...	.....	76,838
West Khandesh.	Earth ... ... Cart-loads.	.....	...	1,400	172	...	...	...	...	1,400	172
	Stone ... ... Do.	.....	...	1,917	215	...	...	...	...	1,917	215
	Murum ... ... Do.	.....	...	17	2	...	...	...	...	17	2
	Karvi ... ... Do.	.....	...	478	60	...	...	...	...	478	60
	Reed ... ... Do.	.....	...	865	124	...	...	...	...	865	124
	Manure ... ... Do.	.....	...	2,416	760	...	...	...	...	2,416	760
	Limestone ... ... Do.	.....	...	325	40	...	...	...	...	325	40
	Thorns ... ... Do.	.....	...	825	60	...	...	...	...	825	60
	Mango fruits	.....	...	.....	693	...	...	...	...	.....	693
	Anjan and tarwad leaves ... Head-loads.	.....	...	469	15	...	...	...	...	469	15
	Rosha oil stills	.....	...	179	13,644	...	...	...	...	179	13,644
	Grass and grazing	.....	...	.....	1,10,306	...	...	...	...	.....	1,10,306
	Total ...	.....	...	.....	1,26,091	...	...	...	...	.....	1,26,091
Nasik.	Grass ... ... Bundles.	.....	...	86,875	87	...	...	...	...	86,875	87
	Do. ... ... Cart-loads.	.....	...	227	106	...	...	...	...	227	106
	Grazing fee	.....	...	.....	43,251	...	...	...	...	.....	43,251
	Do. by auction	.....	...	.....	15,933	...	...	...	...	.....	15,933
	Mango fruits	.....	...	.....	5	...	...	...	...	.....	5
	Manure ... ... Cart-loads.	.....	...	8	1	...	...	...	...	8	1
	Karvi ... ... Cubic feet.	.....	...	110,411	512	...	...	...	...	110,411	512
	Rab ... ... Do.	.....	...	14,403	160	...	...	...	...	14,403	160
	Thorns ... ... Do.	.....	...	5,040	50	...	...	...	...	5,040	50
	Stone ... ... Do.	.....	...	24,710	122	3,870	1	...	...	28,580	123
	Rosha oil	.....	...	.....	924	...	...	...	...	.....	924
	Earth ... ... Cart-loads.	.....	...	.....	...	100	6	...	...	100	6
	Hirda nuts	K. m. lbs. 39 4 8	774	.....	...	...	...	...	...	K. m. lbs. 39 4 8	774
	Total ...	.....	774	.....	61,151	...	7	...	...	.....	61,932
Ahmednagar.	Hirda nuts. Bombay Khandy ...	K. m. p. 54 8 16	784	.....	...	...	...	...	...	K. m. p. 54 8 16	784
	Stone ... ... Cart-loads.	.....	..	6,404	554	...	...	...	...	6,404	554
	Karvi ... ... Head-loads.	.....	...	2,789	88	...	...	...	...	2,789	88
	Wild fruits	.....	...	.....	135	...	...	...	...	.....	135
	Tarwad	.....	...	.....	155	...	...	...	...	.....	155
	Babul pods	.....	...	.....	414	...	...	...	...	.....	414
	Miscellaneous	.....	...	.....	128	...	...	...	...	.....	128
	Earth ... ... Cart-loads.	.....	...	.....	5	...	...	...	...	.....	5
	Grass and grazing	.....	...	.....	43,372	...	...	...	...	.....	43,372
	Total ...	.....	784	.....	44,851	...	...	...	...	.....	45,635
Poona.	Grass and grazing	.....	...	.....	43,062	...	...	...	...	.....	43,062
	Hirda nuts	K. m. lbs. 3 3 16	73	K. m. lbs. 65 19 7	3,679	...	...	...	...	K. m. lbs. 68 22 23	3,752
	Tarwad	.....	...	.....	389	...	...	...	...	.....	389
	Roofing materials	.....	...	2 Cart loads. 858 Head-loads 1,480 Cart-loads.	76	...	...	...	...	2 Cart-loads. 858 Head-loads 1,489 Cart-loads.	76 395
	Minerals	.....	...	.....	395	...	...	...	...	.....	395
	Toddy fee	.....	...	.....	32	...	...	...	...	.....	32
	Miscellaneous	.....	...	.....	63	...	...	...	...	.....	63
	Rab	.....	...	.....	...	...	200	...	...	.....	200
	Total ...	.....	73	.....	47,696	...	200	...	...	.....	47,969
Sátára.	Hirda nuts	K. m. lbs. 824 16 16	16,945	.....	...	...	...	...	...	K. m. lbs. 824 16 16	16,945
	Shikakai ... ... Contract.	.....	...	.....	725	...	...	...	...	.....	725
	Brushwood ... ... Cart-loads.	.....	...	448	50	...	...	...	...	448	50
	Stone ... ... Do.	.....	...	16,450	1,006	...	...	...	...	16,450	1,003
	Earth ... ... Do.	.....	...	5	1	...	...	...	...	5	1
	Fruits	.....	...	.....	17	...	...	...	...	.....	17
	Tarwad bark ... Contract.	.....	...	.....	564	...	...	...	...	.....	564
	Aloe ... ... Head-loads.	.....	...	43	4	...	...	...	...	43	4
	Thorns ... ... Do.	.....	...	9,329	603	...	...	...	...	9,329	603
	Karvi ... ... Do.	.....	...	28	1	...	...	...	...	28	1
	Shewri	.....	...	.....	64	...	...	...	...	.....	64
	Canes ... ... Head-loads.	.....	...	400	3	...	...	...	...	400	3
	Manure	.....	...	.....	7	...	...	...	...	.....	7
	Grass and grazing	.....	...	.....	36,761	...	...	...	...	.....	36,761
	Total ...	.....	16,945	.....	39,896	...	...	...	...	.....	56,751
Sholápur.	Mango fruits	.....	...	.....	25	...	...	...	...	.....	25
	Tamarind fruits	.....	...	.....	1	...	...	...	...	.....	1
	Tádi juice	.....	...	.....	1	...	...	...	...	.....	1
	Sand ... ... Cart-loads.	.....	...	230	39	...	...	...	...	230	39
	Earth ... ... Do.	.....	...	5	1	...	...	...	...	5	1
	Grass and grazing	.....	...	.....	24,088	...	...	...	...	.....	24,088
	Total ...	.....	...	.....	24,155	...	...	...	...	.....	24,155

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 59.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1892-93.

Particulars.	Number or Quantity.	Cubic feet.	Total of each head. Number or Quantity.	Total of each head. Cubic feet.	Particulars.	Number or Quantity.	Cubic feet.	Total of each head. Number or Quantity.	Total of each head. Cubic feet.
TIMBER.									
Balance at the commencement of the year.					*Sold locally.*				
West Khándesh., Teak pieces ...	8,184	4,092	8,184	4,092	Teak logs and rafters	311,094	271,670		
					Do. pieces	90,572	27,134		
					Junglewood pieces	2,073	1,316		
Násik ... ... { Do. logs and rafters	20	120	20	120				4,03,739	3,00,120
					Used by the Department.				
Ahmednagar ... Do. do. ...	8	12	8	12	Teak pieces	30	11	30	11
					Free Grants.				
Sátára ... ... { Do. do. ... Jungle wood pieces.	967	249	.....	.....					
	2,023	1,016	2,999	1,265	Teak logs and rafters	34	13	34	13
			11,202	5,489	*Lost and written off.*				
Received from the Forests in Depôts.					Teak logs and rafters	1	6		
Teak logs and rafters	324,340	285,638			Do. pieces	272	308		
Do. pieces	93,594	29,398						273	314
Junglewood rafters	50	300							
			4,17,984	3,15,336				404,076	300,458
					Balance at the close of the year.				
					West Khándesh... { Teak logs and rafters.	14,164	14,164		
					Do. pieces.	8,309	4,132	22,473	18,296
					Násik ... ... { Teak logs and rafters.	21	126	21	126
					Ahmednagar ... Do. do. ...	21	40	21	40
					Sátára ... ... Teak pieces...	2,595	1,905	2,595	1,905
					Total, Balance ...	...	.....	25,110	20,367
Total ...	...	.....	429,186	320,825	Total ...	...	.....	429,186	320,825
FIREWOOD.									
Balance at the commencement of the year.					*Sold locally.*				
West Khándesh. Firewood ...	...	20,226	.....	20,226	Firewood... ... Khandies ...	17,565	1,879,759		
					Teak loppings ... Stacks... ...	36,651	.....	54,216	1,879,759
Sátára ... ... Do. ...	...	44,775	.....	44,775	Firewood	...	1,200	.....	1,200
Sholápur ... Do. ...	...	366	.....	366					
				65,367	*Free Grants.*				
Received from the Forests in Depôts.					Firewood	...	225		
Firewood ... Khandies ...	20,837	2,005,584			Teak loppings ... Stacks ...	8,714	.....	8,714	225
Teak loppings... Stacks ...	45,365	.....			*Lost or written off.*				
			66,202	2,005,584	Firewood	...	4,525	.....	4,525
								62,930	1,885,709
					Balance at the close of the year.				
					East Khándesh ... Firewood ...	3,272	147,240	3,272	147,240
					West Khándesh... do. ...	...	19,768	.....	19,768
					Násik ... ... do. ...	...	673	.....	673
					Ahmednagar ... do. ...	...	74	.....	74
					Sátára ... ... do. ...	...	17,470	.....	17,470
					Sholápur ... ... do. ...	...	17	.....	17
					Total, Balance ...	...	.....	3,272	185,242
Total ...	...	.....	66,202	2,070,951	Total ...	...	.....	66,202	2,070,951
BAMBOOS.									
Balance at the commencement of the year.					*Sold locally.*				
					Bamboos	500	.....	500	.....
Received from the Forests in Depôts.								500	.....
Bamboos	500	.....	500	.....	*Balance at the close of the year.*				
					Total ...	...	.....	500	.....
Total ...	...	.....	500	.....					

FORM No. 59—*continued.*

Particulars.	Number or Quantity.	Cubic feet.	Total of each head. Number or Quantity.	Total of each head. Cubic feet.	Particulars.	Number or Quantity.	Cubic feet.	Total of each head. Number or Quantity.	Total of each head. Cubic feet.
				OTHER MINOR PRODUCE.					
Balance at the commencement of the year.		K. m. lbs.		K. m. lbs.	*Sold locally.*		K. m. lbs.		K. m. lbs.
Násik ... ... Seed	...	1 2 12	.....	1 2 12	Hirda	...	713 27 3	.....	713 27 3
Ahmednagar ... Hirda... ...	...	44 1 20	.....		*Used by the Department.*				
Ahmednagar ... Seed	...	32 22 20	.....	76 24 12	Hirda	...	1 2 20	.....	
Sátára ... ... Hirda... ...	...	124 27 15	.....		Seed	...	312 18 18	.....	313 21 10
Sátára ... ... Seed	...	40 2 8	.....	165 1 23	*Lost or written off.*				
				K. m. lbs. 243 . 0 19	Hirda	...	166 23 6	.....	166 23 6
									1,194 15 19
Received from the Forests in Depôts.	Bags.	K. m. lbs.			*Balance at the close of the year.*	Bags.			
Hirda	...	930 25 13	.....	.....	East Khándesh ... Seed	120	.....	120	.....
Seed	120	462 0 20	120	1,391 26 5			K. m. lbs.		K. m. lbs.
					Násik ... ... Do.	...	1 19 4	.....	1 19 4
					Ahmednagar ... Seed	...	148 3 7	.....	
					Ahmednagar ... Hirda... ...	...	18 20 13	.....	166 23 20
					Sátára ... ... Hirda... ...	...	208 9 6	.....	
					Sátára ... ... Seed	...	55 17 19	.....	263 26 25
					Sholápur ... ... Seed	...	7 25 12	.....	7 25 12
								Bags.	
					Total, Balance ...	...	.....	120	440 11 5
Total ...	...	.....	Bags. 120	K. m. lbs. 1,634 26 24	Total ...	...	.....	Bags. 120	K. m. lbs. 1,634 26 24

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 60.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1892-93.

Description of Timber and other Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in Value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
East Khándesh Division.									
Firewood	.....	...	...	Khandis. 3,272	147,240	1,639	...	...	
Seed	Kh. m. lb. 35 14 16	...	...	Bags. 120	...	...	...	...	
Total ...	.....	...	...	.....	...	1,639	1,639	...	
West Khándesh Division.									
Teak pieces	8,184	4,050	800	8,309	4,132	8,000	...	...	
Do. rafters	.....	...	...	14,164	14,164				
Firewood	.....	20,226	350	.....	19,768	349	...	...	
Total ...	.....	...	1,150	.....	...	8,349	7,199	...	
Násik Division.									
Teak rafters	.....	120	80	21	126	21	...	...	
Seed	.....	K. m. lb. 1 2 12	22	.....	K. m. lb. 1 19 4	25	...	...	
Total ...	.....	...	102	.....	....	46	...	56	
Ahmednagar Division.									
Teak rafters	8	12	3	21	40	10	...	...	
Firewood	.....	...	...	.....	74	8	...	...	
Hirda	.....	K. m. lb. 44 1 20	...	... ..	*K. m. lb. 18 20 13	3	...	...	* Out of this 18-16-8 are on account of dryage.
Seed	.....	K. m. lb. 32 22 20	...	.....	K. m. lb. 148 3 7	...	...	...	
Total ...	.....	...	3	.....	...	21	18	...	
Sátára Division.									
Teak pieces	967	249	186	2,595	1,905	303	...	...	
Junglewood pieces	2,023	1,016	290	.....	...	...	...	...	
Firewood	.....	44,775	999	.....	17,470	392	...	...	
Hirda	.. ...	K. m. lb. 124 27 15	32	.....	†K. m. lb. 208 9 6	22	...	...	† With the exception of 133 pállies or K. 1 m. 19 lb. 0 the whole quantity is to be written off.
Seed	.....	K. m. lb. 40 2 8	...	.....	K. m. lb. 55 17 19	...	...	...	
Total ...	.....	...	1,507	.....	...	717	...	790	
Sholápur Division.									
Firewood	.....	366	27	.....	17	1	...	...	
Seed	.....	...	...	.....	K. m. lb. 7 25 12	...	...	...	
Total ...	.....	...	27	.. ...	...	1	...	26	
Grand Total ...	.....	...	2,789	... ..	...	10,773	8,856	872	

Net difference in favour of the year, Rs. 7,984.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

B 827—18 cc

FORM No. 60 A.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Abstract showing the Value of Live and Dead Stock for the year 1892-93.

Description of Live and Dead Stock	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	No.	Value.	No.	Value.	In favour of the year. No.	Against the year. Value.	
Direction Division.		Rs.		Rs.		Rs.	
Office tents	*2	973	1	541	...	...	*The old office tent has been sent to the Deputy Conservator of Forests, N. C.
Rahuti	1	95	1	95	...	...	
Tools, plant and office furniture ...	.....	1,070	.....	1,120	...	...	
Total ...	.....	2,138	.....	1,756	...	382	
East Khándesh Division.							
Office tent	1	248	1	248	...	...	
Great coats	192	1,254	192	1,254	...	...	
Tools, plant and office furniture ...	.....	805	.....	1,007	...	..	
Total ...	.....	2,307	.....	2,509	202	...	
West Khándesh Division.							
Office tent	1	387	1	387	...	...	
Cabul pal	1	126	1	126	...	...	
Great coats	219	1,428	219	1,428	...	...	
Tools, plant and office furniture ...	.....	5,931	.....	6,040	...	...	
Total ...	.....	7,872	.....	7,981	109	...	
Násik Division.							
Office tents	2	544	2	544	...	...	
Great coats	303	1,976	303	1,976	...	...	
Tools, plant and office furniture ...	.....	258	.....	258	...	...	
Total ...	.....	2,778	.....	2,778	...	...	
Ahmednagar Division.							
Office tent	1	387	1	387	...	...	
Office room, Range Forest Officer, Karjat	1	214	1	214	...	...	
Hirda depôt at Shinganwadi	1	25	1	25	...	...	
Forest rest-houses	3	90	3	90	...	...	
Great coats	208	1,357	208	1,357	...	...	
Tools, plant and office furniture ..	.....	1,115	.....	1,133	...	...	
Total ...	.....	3,188	.....	3,206	18	...	
Poona Division.							
Office tent	1	433	1	433	...	...	
Rahuti	.....	...	1	80	...	...	
Range Forest Officer's offices	5	7,752	9	14,134	...	...	
Great coats	315	2,054	315	2,054	...	...	
Tools, plant and office furniture ...	.....	922	.....	1,131	...	...	
Total ...	.....	11,161	.....	17,832	6,671	...	
Sátára Division.							
Bungalow at Malcolmpeth	1	700	1	700	...	...	
Office tent	1	433	1	433	...	...	
Cabul pal	1	111	1	111	...	...	
Great coats	246	1,606	246	1,606	...	...	
Tools, plant and office furniture ...	.....	921	.....	1,078	...	...	
Total ...	.....	3,771	.....	3,928	157	...	
Sholápur Division.							
Office tent	1	387	1	387	...	...	
Great coats	119	777	119	777	...	...	
Tools, plant and office furniture ..	.....	231	.....	6,085	...	...	
Total ...	.....	1,395	.....	7,249	5,854	...	
Grand Total ...	.....	34,610	.....	47,239	13,011	382	

Net difference in favour of the year Rs. 12,629.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 61.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Summary of Revenue and Expenditure of the different Divisions during the Forest year 1892-93 (from April 1892 to end of June 1893).

Budget Heads.	Direction.	East Khándesh Division.	West Khándesh Division.	Násik Division.	Ahmednagar Division.	Poona Division.	Sátára Division.	Sholápur Division.	Total for the Forest year 1892-93.
REVENUE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other Produce removed from the Forests by Government Agency—									
a. Timber	.....	10,152 2 3	63,192 4 2	1,124 8 0	7,872 14 3	26,543 9 0	9,058 6 2	.....	1,17,943 11 10
b. Firewood and charcoal	.....	29,778 3 0	12,432 12 0	3,321 8 0	635 2 6	835 13 11	4,910 0 9	2,103 5 0	54,016 13 2
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandalwood	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	773 8 9	783 12 0	72 12 8	16,945 1 0	.....	18,575 2 5
Total I.	.....	39,930 5 3	75,625 0 2	5,219 8 9	9,291 12 9	27,452 3 7	30,913 7 11	2,103 5 0	1,90,535 11 5
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—									
a. Timber	.....	6,023 8 0	17,300 8 0	30,345 12 2	266 12 11	1,394 13 3	12,340 13 3	11,154 8 6	78,826 12 1
b. Firewood and charcoal	.....	10,710 10 6	8,542 1 6	3,868 13 3	3,846 3 4	8,002 1 9	325 5 6	491 6 1	35,786 9 11
c. Bamboos	.....	10,122 5 11	4,731 5 0	6,188 11 10	772 10 9	1,476 10 3	1,109 12 7	0 8 0	24,402 0 4
d. Grazing and fodder grass	.....	75,173 5 11	1,10,306 6 6	59,377 3 3	43,372 6 6	43,061 13 6	36,760 10 0	24,088 4 8	3,92,140 2 4
e. Other minor produce	.....	1,665 1 0	15,784 15 6	1,774 2 4	1,479 2 0	4,633 9 4	3,045 4 9	66 11 4	28,448 14 3
Total II.	.....	1,03,694 15 4	1,56,665 4 6	1,01,554 10 10	49,737 3 6	58,569 0 1	53,581 14 1	35,801 6 7	5,59,604 6 11
III.—Drift and Waif Wood and confiscated Forest Produce	.....	528 11 8	701 7 0	206 14 3	145 8 11	710 2 1	98 9 11	26 6 6	2,417 12 4
Total III.	.....	528 11 8	701 7 0	206 14 3	145 8 11	710 2 1	98 9 11	26 6 6	2,417 12 4
IV.—Revenue from Forests not managed by Government—									
a. Duty on foreign timber and other forest produce	.....	19,013 6 3	17,698 8 6	.....	.....	.....	.....	.....	36,909 14 9
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	513 3 7	.....	.....	513 3 7
Total IV.	.....	19,013 6 3	17,896 8 6	.....	.....	513 3 7	.....	.....	37,423 2 4
V.—Miscellaneous—									
a. Fines and forfeitures	.....	75 0 0	100 0 0	1,174 13 1	24 6 0	714 2 0	187 13 0	7 0 0	2,283 2 1
b. Refunds	0 8 0	31 11 10	18 2 1	19 11 5	9 13 4	546 5 5	20 13 4	26 5 5	673 6 10
c. Other sources	1 4 0	3,962 12 8	4,781 0 0	6,784 3 2	2,047 3 3	8,107 15 4	2,984 3 3	1,888 14 4	30,557 8 0
Total V.	1 12 0	4,069 8 6	4,899 2 1	7,978 11 8	2,081 6 7	9,368 6 9	3,192 13 7	1,922 3 9	33,514 0 11
Grand Total Revenue	1 12 0	1,67,236 15 0	2,55,787 6 3	1,14,959 13 6	61,255 15 9	96,613 0 1	87,786 13 6	39,853 5 10	8,23,495 1 11

FORM No. 61—*continued.*

Budget Heads.	Direction.	East Khándesh Division.	West Khándesh Division.	Násik Division.	Ahmednagar Division.	Poona Division.	Satara Division.	Sholapur Division.	Total for the Forest Year 18[illegible].
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
EXPENDITURE.									
A.—CONSERVANCY AND WORKS.									
I.—Timber and other Produce removed from the Forests by Government Agency—									
a. Timber	.....	1,272 8 0	4,044 2 1	71 15 0	1,215 2 5	2,877 4 6	1,154 2 0	.....	10,635 2 0
b. Firewood and charcoal	.....	6,480 0 0	2,407 2 9	676 15 0	18 9 0	183 9 0	2,206 13 0	109 1 6	12,082 2 3
c. Bamboos	.....	.....	5 0 0	.....	.....	.....	.....	.....	5 0 0
d. Sandalwood	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	20 15 6	582 11 3	30 5 0	6,268 3 4	.....	6,902 3 1
Total A, I. ...	.....	7,752 8 0	6,456 4 10	769 13 6	1,816 6 8	3,091 2 6	9,629 2 4	109 1 6	29,624 7 4
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers ...	.....	6,882 0 7	6,801 14 1	3,273 9 1	2,771 7 1	779 8 2	561 7 6	580 8 5	21,650 6 11
Total A, II. ...	.....	6,882 0 7	6,801 14 1	3,273 9 1	2,771 7 1	779 8 2	561 7 6	580 8 5	21,650 6 11
III.—Drift and Waif Wood and confiscated Forest Produce	.....	34 0 3	.....	11 1 6	20 4 0	18 8 6	3 12 10	.....	87 11 1
Total A, III. ...	.....	34 0 3	.....	11 1 6	20 4 0	18 8 6	3 12 10	.....	87 11 1
IV.—Revenue from Forests not managed by Government—									
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests...	.....	0 2 0	.....	.....	.....	.....	.....	.....	0 2 0
Total A, IV. ...	.....	0 2 0	.....	.....	.....	.....	.....	.....	0 2 0
V.—Rent of leased Forests and payments to shareholders in Forests managed by Government ...	.....	.....	.....	18 11 4	118 10 9	2,033 13 9	3,184 15 2	.....	5,356 3 0
Total A, V. ...	.....	.....	.....	18 11 4	118 10 9	2,033 13 9	3,184 15 2	.....	5,356 3 0

VI.—Live Stock, Stores, Tools and Plant—									
a. Purchase of cattle	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Purchase of stores, tools and plant ...	50 0 0	204 15 11	144 14 10	95 4 0	138 7 9	306 14 0	410 5 0	42 0 9	1,392 14 3
Total A, VI. ...	50 0 0	204 15 11	144 14 10	95 4 0	138 7 9	306 14 0	410 5 0	42 0 9	1,392 14 3
VII.—Communications and Buildings—									
a. Roads and bridges	.....	.....	6 12 0	.....	.....	.....	.....	.....	6 12 0
b. Buildings	.....	392 8 0	1,559 14 5	125 8 0	.....	20 0 0	98 0 3	2 8 0	2,198 6 8
c. Other works	.....	.....	.....	.....	.....	8 1 6	.....	.....	8 1 6
Total A, VII ...	.....	392 8 0	1,566 10 5	125 8 0	.....	28 1 6	98 0 3	2 8 0	2,213 4 2
VIII.—Demarcation, Improvement, and Extension of Forests—									
a. Demarcation	.....	58 10 9	9,775 11 5	4,104 8 6	2,509 14 3	4,330 2 11	3,148 3 7	516 11 4	24,443 14 9
b. Compensation for land and rights ...	.....	1,712 9 6	.....	.....	676 14 8	173 7 0	135 0 0	.....	2,697 15 2
c. Surveys	.....	.....	.....	.....	.....	28,928 13 11	.....	2,152 11 7	31,081 9 6
d. Working-plans	2,550 0 0	710 4 7	476 12 0	556 14 9	501 15 0	877 12 3	522 8 3	502 8 0	6,699 4 10
e. Sowing and planting	4 1 6	446 8 8	405 6 0	3,840 0 11	3,131 2 10	3,635 8 9	1,941 10 8	805 1 9	14,209 9 1
f. Protection from fire	.....	280 8 0	904 6 0	166 2 6	.....	8 5 0	5 14 0	.....	1,365 3 6
g. Other works	.....	.....	1,757 5 9	874 10 0	2,269 6 3	2,791 10 3	474 6 9	3,941 13 0	12,109 4 0
Total A, VIII ...	2,554 11 6	3,208 9 6	13,319 9 2	9,542 4 8	9,089 5 0	40,745 12 1	6,227 11 3	7,918 13 8	92,606 12 10
IX.—Miscellaneous—									
a. Refunds	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Law charges	.....	89 10 0	.....	0 12 9	.....	0 15 0	20 0 0	.....	111 5 9
c. Other charges	733 9 5	456 10 10	336 4 3	1,468 15 10	—136 13 7	1,558 13 11	2,784 11 11	379 14 10	7,582 3 5
Total A, IX ...	733 9 5	546 4 10	336 4 3	1,469 12 7	—136 13 7	1,559 12 11	2,804 11 11	9 14 10	7,693 9 2
Total A, CONSERVANCY AND WORKS ...	3,338 4 11	19,021 1 1	28,625 9 7	15,306 0 8	13,817 11 8	48,563 9 5	22,920 2 3	9,032 15 2	1,60,625 6 9
B.—ESTABLISHMENTS.									
I.—Salaries—									
a. Conservators	23,900 0 0	.....	.....	.....	.....	.....	.....	.....	23,900 0 0
b. Superior Officers	1,050 0 0	10,046 7 7	11,908 6 1	17,835 0 0	1,960 5 6	21,525 0 0	15,510 7 4	9,650 0 0	89,485 10 6
c. Subordinate Forest and Depôt Establishments	.....	28,790 6 10	28,505 7 3	41,502 1 0	30,267 7 5	42,927 7 10	35,477 7 6	15,145 13 1	2,22,616 2 11
d. Office Establishments	8,174 6 6	2,789 3 4	3,159 4 11	3,158 11 8	2,147 5 5	3,178 11 4	3,259 15 4	2,514 2 11	28,381 13 5
e. Deputation and Special Allowances ...	420 0 0	.....	240 0 0	.....	.....	326 6 0	.....	9 0 0	995 6 0
Total B, I. ...	33,544 6 6	41,626 1 9	43,813 2 3	62,495 12 8	34,375 2 4	67,957 9 2	54,247 14 2	27,319 0 0	3,65,379 0 10

FORM No. 61—*continued.*

Budget Heads.	Direction.	East Khándesh Division.	West Khándesh Division.	Násik Division.	Ahmednagar Division.	Poona Division.	Sátára Division.	Sholapur Division.	Total for the Forest year 1892-93.
EXPENDITURE—*continued.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
B.—ESTABLISHMENTS—*continued.*									
II.—Travelling Allowances—									
a. Conservators	3,000 0 0	.....	.....	.....	.....	.....	.....	.....	3,000 0 0
b. Superior Officers	7 11 10	2,062 6 4	2,949 13 11	3,236 13 2	450 0 0	3,643 4 0	3,176 12 1	2,272 0 0	17,798 13 4
c. Subordinate Forest and Depôt Establishments	.....	2,057 14 5	1,636 3 2	2,494 8 11	2,145 13 10	2,130 0 6	2,296 0 10	1,100 10 3	13,861 3 11
d. Office Establishments	1,906 12 10	880 15 2	1,027 5 11	1,260 7 5	911 9 0	1,106 2 0	1,146 6 8	936 4 9	9,175 15 9
Total B, II ...	4,914 8 8	5,001 3 11	5,613 7 0	6,991 13 6	3,507 6 10	6,879 6 6	6,619 3 7	4,308 15 0	43,836 1 0
III.—Contingencies—									
a. Stationery	32 8 0	453 2 5	452 8 5	846 13 6	519 12 9	640 2 4	567 10 6	292 3 3	3,804 13 2
b. Carriage of Tents and Records ...	413 2 0	255 10 9	288 0 0	463 2 8	200 0 0	307 1 9	416 12 0	129 8 0	2,473 5 2
c. Rents, Rates and Taxes	600 0 0	373 11 9	339 4 7	87 0 8	390 0 0	355 0 0	117 15 8	33 15 6	2,297 0 2
d. Pay of Police Guards	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official Postage	518 8 6	854 4 6	778 13 0	1,108 14 0	793 4 0	1,129 1 0	1,200 7 0	436 10 0	6,819 14 0
f. Sundries	268 5 5	458 15 4	951 15 1	239 4 11	84 1 6	211 8 2	485 2 2	57 3 9	2,756 8 4
Payments to Officers of other Provinces ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total B, III ...	1,832 7 11	2,395 12 9	2,810 9 1	2,745 3 9	1,987 2 3	2,642 13 3	2,787 15 4	949 8 6	18,151 8 10
Total B, ESTABLISHMENTS ...	40,291 7 1	49,023 2 5	52,237 2 4	72,232 13 11	39,869 11 5	77,479 12 11	63,655 1 1	32,577 7 6	4,27,366 10 8
GRAND TOTAL OF EXPENDITURE ...	43,629 12 0	68,044 3 6	80,862 11 11	87,538 14 7	53,687 7 1	1,26,043 6 4	86,575 3 4	41,610 6 8	5,87,992 1 5

No. F. / 16180

Forwarded to the Conservator of Forests, Central Circle, under Section 267 of the Forest Department Code, with eight divisional summaries.

Office of the Accountant General, Bombay, dated 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 62.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Annual Account Current for the year 1892-93.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance	.....	322 1 3	1.—Refunds and Drawbacks—Refunds—Divided Heads, Forest	.....	1,754 5 0
„ VIII.—Assessed Taxes—Income Tax—Deductions by Government from Salaries and Pensions ...	.....	3,486 9 1			
„ IX.—Forest (as per Summary) ...	.....	8,23,495 1 11	11.—Forest (as per Summary)	.....	5,87,992 1 5
„ XII.—Interest—Interest on Arrears of Revenue ...	.....	142 9 4	19.—Law and Justice—Jails, District Jails, Contingencies ..	.....	.....
„ XV.—Law and Justice—General Fees, Fines and Forfeitures—Magisterial Fines	.....	3 0 0	Revenue Deposits (Forests)	.....	21,164 14 11
„ XXIII.—Stationery and Printing—Stationery Receipts—Sale-proceeds of Stationery Boxes	.....	.....	Cheques and Bills (Forest Cheques cancelled).	.....	1,608 13 3
Other Press Receipts—Government Central Press ...	.....	4 4 3	Advances Recoverable—		
„ XXV.—Miscellaneous—Sale-proceeds of old Stores and Materials, 1 Provincial ...	.....	7 6 0	Forest Advances	3,71,815 12 2	.....
			Tentage Advances	.....	.....
„ Revenue Deposits (Forest)	.....	25,840 10 3	Objection Book Advances ...	347 13 6	.....
„ Cheques and Bills (Departmental cheques), Forest...	.....	5,78,282 4 4			3,72,163 9 8
„ Advances Recoverable—			Cash Recoveries	.....	12,741 13 5
Forest Advances...	3,62,610 13 10	.....	Forest Remittances—		
Tentage Advances	.....	.....	Remittances to Treasuries ...	8,37,639 5 10	.....
Objection Book Advances	357 6 0	.....	Inter-divisional Transfers... ...	8,958 2 3	.....
		3,62,968 3 10	Inter-departmental Transfers ...	.....	.....
					8,46,597 8 1

FORM No. 62—*continued.*

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Cash Recoveries	.....	12,741 13 5	Account Current—		
„ Forest Remittances —			Account between Bombay and Military, Bombay—		
Remittances to Treasuries	492 14 6		IV.—Items adjustable by Military ...	.....	.....
Inter-divisional Transfers	32,548 9 3				
Inter-departmental Transfers ...	2,799 1 2				
		35,840 8 11	Account between Bombay and Public Works Department, Bombay—(Ordinary Branches)—		
„ Bombay Uncovenanted Service Family Pension Fund, Widows' Branch ...	.....	2,299 4 9	IV.—Items adjustable by Public Works Department	.....	826 12 2
„ Account between India and Bombay—					
III.—Items adjustable by India—			Account between Bombay and Public Works Department (Railway Branch) Railway—		
Bengal Military Fund	.....	.....			
„ „ Orphan Fund ...	.....	.....			
Bengal Uncovenanted Service Family Pension Fund...	.....	.....	IV.—Items adjustable by Public Works Department	.....	1,098 0 0
„ Account between Bombay and Public Works Department, Bombay—					
IV.—Payments into Treasuries by Civil Officers on account of Public Works Department	.....	1,148 8 2	Closing Balance ...		634 7 7
Total ...	.....	18,46,582 5 6	Total	.....	18,46,582 5 6

No. $\frac{F.}{16177}$

Forwarded to the Conservator of Forests, Central Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 63.

FORM No. 63.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Revenue received and outstandings on account of Revenue during 1892-93.

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	REMARKS.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
East Khándesh.	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	.....	10,152 2 3	10,152 2 3	10,152 2 3	.....	
	b. Firewood and charcoal	.....	29,778 3 0	29,778 3 0	29,778 3 0	.....	
	c. Bamboos	.....	.....	.....	.....	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	.....	.....	.....	.....	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	.....	6,023 8 0	6,023 8 0	6,023 8 0	.....	
	b. Firewood and charcoal	.....	10,710 10 6	10,710 10 6	10,710 10 6	.....	
	c. Bamboos	.....	10,122 5 11	10,122 5 11	10,122 5 11	.....	
	d. Grazing and fodder grass ...	.....	75,173 5 11	75,173 5 11	75,173 5 11	.....	
	e. Other minor produce	.....	1,665 1 0	1,665 1 0	1,665 1 0	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	528 11 8	528 11 8	528 11 8	.....	
	Total ...	.....	1,44,154 0 3	1,44,154 0 3	1,44,154 0 3	.....	
West Khándesh.	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	7,819 0 0	56,741 15 8	64,560 15 8	63,192 4 2	1,368 11 6	
	b. Firewood and charcoal	.....	12,432 12 0	12,432 12 0	12,432 12 0	.....	
	c. Bamboos	.....	.....	.....	.....	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	.....	.....	.....	.....	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	.....	17,300 8 0	17,300 8 0	17,300 8 0	.....	
	b. Firewood and charcoal	.....	8,542 1 6	8,542 1 6	8,542 1 6	.....	
	c. Bamboos	.....	4,731 5 0	4,731 5 0	4,731 5 0	.....	
	d. Grazing and fodder grass ...	.....	1,10,306 6 6	1,10,306 6 6	1,10,306 6 6	.....	

	e. Other minor produce	.....	15,784 15 6	15,784 15 6	15,784 15 6	.....
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	701 7 0	701 7 0	701 7 0	.....
	Total ...	7,819 0 0	2,26,541 7 2	2,34,360 7 2	2,32,991 11 8	1,368 11 6
Násik ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*					
	a. Timber	14 2 0	1,110 6 0	1,124 8 0	1,124 8 0	.....
	b. Firewood and charcoal	.....	3,321 8 0	3,321 8 0	3,321 8 0	.....
	c. Bamboos	.....	.....	.....	.....	.....
	d. Sandalwood	.....	.....	.....	.....	.....
	e. Grass and other minor produce ...	305 2 9	924 3 9	1,229 6 6	773 8 9	455 13 9
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
	a. Timber	442 8 0	29,903 4 2	30,345 12 2	30,345 12 2	.....
	b. Firewood and charcoal	.....	3,868 13 3	3,868 13 3	3,868 13 3	.....
	c. Bamboos	.....	6,188 11 10	6,188 11 10	6,188 11 10	.....
	d. Grazing and fodder grass ...	477 0 0	59,377 3 3	*59,854 3 3	59,377 3 3	23 0 0
	e. Other minor produce	90 0 0	1,774 2 4	†1,864 2 4	1,774 2 4	.....
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	206 14 3	206 14 3	206 14 3	.....
	Total ...	1,328 12 9	1,06,675 2 10	1,08,003 15 7	1,06,981 1 10	478 13 9
Ahmednagar ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*					
	a. Timber	.....	7,872 14 3	7,872 14 3	7,872 14 3	.....
	b. Firewood and charcoal	.....	635 2 6	635 2 6	635 2 6	.....
	c. Bamboos	.....	.....	.....	.....	.....
	d. Sandalwood	.....	.....	.....	.....	.....
	e. Grass and other minor produce ...	.....	783 12 0	783 12 0	783 12 0	.....
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
	a. Timber	.....	266 12 11	266 12 11	266 12 11	.....
	b. Firewood and charcoal	.....	3,846 3 4	3,846 3 4	3,846 3 4	.....
	c. Bamboos	.....	772 10 9	772 10 9	772 10 9	.....
	d. Grazing and fodder grass ...	.....	43,372 6 6	43,372 6 6	43,372 6 6	.....
	e. Other minor produce	.....	1,479 2 0	1,479 2 0	1,479 2 0	.....
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	145 8 11	145 8 11	145 8 11	.....
	Total ...	.....	59,174 10 2	59,174 10 2	59,174 10 2	.....

* Out of this sum the amount of Rs. 454 has been written off.
† Out of this sum the amount of Rs. 90 has been written off.

FORM No. 63—*continued.*

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Poona	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	.....	26,543 9 0	26,543 9 0	26,543 9 0	.....	
	b. Firewood and charcoal	15 7 11	820 6 0	835 13 11	835 13 11	.....	
	c. Bamboos	.....	.....	.....	.....	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	.....	72 12 8	72 12 8	72 12 8	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	.....	1,394 13 3	1,394 13 3	1,394 13 3	.....	
	b. Firewood and charcoal	262 4 0	7,824 13 9	*8,087 1 9	8,002 1 9	.....	* Rs. 85 written off as per Conservator of Forests' No. 601, dated 4th April 1893.
	c. Bamboos	.....	1,476 10 3	1,476 10 3	1,476 10 3	.....	
	d. Grazing and fodder grass ...	.....	43,137 9 6	43,137 9 6	43,061 13 6	75 12 0	
	e. Other minor produce	10 0 0	4,623 9 4	4,633 9 4	4,633 9 4	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	710 2 1	710 2 1	710 2 1	.....	
	Total ...	287 11 11	86,604 5 10	86,892 1 9	86,731 5 9	75 12 0	
Sátára ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	.....	9,058 6 2	9,058 6 2	9,058 6 2	.....	
	b. Firewood and charcoal	.....	4,910 0 9	4,910 0 9	4,910 0 9	.....	
	c. Bamboos	.....	.....	.....	.....	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	.....	16,945 1 0	16,945 1 0	16,945 1 0	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	.....	12,340 13 3	12,340 13 3	12,340 13 3	.....	
	b. Firewood and charcoal	.....	325 5 6	325 5 6	325 5 6	.....	
	c. Bamboos	.....	1,109 12 7	1,109 12 7	1,109 12 7	.....	
	d. Grazing and fodder grass ...	.....	36,760 10 0	36,760 10 0	36,760 10 0	.....	

	e. Other minor produce	.....		3,045	4	9	3,045	4	9	3,045	4	9	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....		98	9	11	98	9	11	98	9	11	.....	
	Total ...	.....		84,593	15	11	84,593	15	11	84,593	15	11	.....	
Sholápur ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*													
	a. Timber	.....		.....			.....			.....			.....	
	b. Firewood and charcoal	.....		2,103	5	0	2,103	5	0	2,103	5	0	.....	
	c. Bamboos	.....		.....			.....			.....			.....	
	d. Sandalwood	.....		.....			.....			.....			.....	
	e. Grass and other minor produce ...	.....		.....			.....			.....			.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—													
	a. Timber	.....		11,154	8	6	11,154	8	6	11,154	8	6	.....	
	b. Firewood and charcoal	.....		494	6	1	494	6	1	491	6	1	3	0 0
	c. Bamboos	.....		0	8	0	0	8	0	0	8	0	.....	
	d. Grazing and fodder grass ...	70	0 0	25,736	12	8	25,806	12	8	24,088	4	8	1,718	8 0
	e. Other minor produce	.....		66	11	4	66	11	4	66	11	4	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....		26	6	6	26	6	6	26	6	6	.....	
	Total ...	70	0 0	39,585	10	1	39,652	10	1	37,931	2	1	1,721	8 0
Total, Central Circle.	*I.—Timber and other Produce removed from the Forests by Government Agency—*													
	a. Timber	7,833	2 0	1,11,479	5	4	1,19,312	7	4	1,17,943	11	10	1,368	11 6
	b. Firewood and charcoal	15	7 11	54,001	5	3	54,016	13	2	54,016	13	2	.....	
	c. Bamboos	.....		.....			.....			.....			.....	
	d. Sandalwood	.....		.....			.....			.....			.....	
	e. Grass and other minor produce ...	305	2 9	18,725	13	5	19,031	0	2	18,575	2	5	455	13 9
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—													
	a. Timber	442	8 0	78,384	4	1	78,826	12	1	78,826	12	1	.....	
	b. Firewood and charcoal	262	4 0	35,612	5	11	35,874	9	11	35,786	9	11	3	0 0
	c. Bamboos	.....		24,402	0	4	24,402	0	4	24,402	0	4	.....	
	d. Grazing and fodder grass ...	547	0 0	3,93,864	6	4	3,94,411	6	4	3,92,140	2	4	1,817	4 0
	e. Other minor produce	100	0 0	28,438	14	3	28,538	14	3	28,448	14	3	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....		2,417	12	4	2,417	12	4	2,417	12	4	.....	
	Grand Total ...	9,505	8 8	7,47,326	3	3	7,56,831	11	11	7,52,557	14	8	3,644	13 3

Note.—The revenue under Budget Heads IV and V is Rs. 37,423-2-4 and Rs. 33,514-0-11, respectively. This has not been shown in the statement in detail, as there are no outstandings against these heads. The total amount realized during the year is Rs. 8,23,495-1-11.

Poona, 1st November 1893.

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

FORM No. 64.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Outstandings and Liabilities on account of Contractors and Disbursers for the Forest year 1892-93, extending from 1st April 1892 to 30th June 1893.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (outstandings).	By Department (liabilities).	
1	2	3	4	5	6	7	8	9	10
Contractors.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
East Khándesh	.....	.....	.....	.....	.....	.....	.....	...	
West Khándesh	.....	.....	.....	.....	.....	.....	.....	...	
Násik	.....	1,559 1 2	1,559 1 2	.....	1,600 0 0	1,600 0 0	40 14 10	...	
Ahmednagar	.....	.....	.....	.....	.....	.....	.....	...	
Poona	.....	.....	.....	.....	.....	.....	.....	...	
Sátára	.....	.....	.....	.....	.....	.....	.....	...	
Sholápur	.....	.....	.....	.....	.....	.....	.....	...	
	.....	1,559 1 2	1,559 1 2	.....	1,600 0 0	1,600 0 0	40 14 10	...	
Disbursers.									
East Khándesh	.....	46,634 0 8	46,634 0 8	0 6 11	47,535 10 10	47,536 1 9	902 1 1	...	
West Khándesh	.....	63,344 4 11	63,344 4 11	500 0 1	64,879 15 2	65,379 15 3	2,035 10 4	...	
Násik	.....	62,419 15 4	62,419 15 4	702 9 9	63,862 13 0	64,565 6 9	2,145 7 5	...	
Ahmednagar	.....	43,047 15 1	43,047 15 1	.....	44,513 14 8	44,513 14 8	1,465 15 7	...	
Poona	.....	64,604 1 4	64,604 1 4	.....	66,189 13 3	66,189 13 3	1,585 11 11	...	
Sátára	.....	62,289 9 5	62,289 9 5	50 0 0	63,769 14 7	63,819 14 7	1,530 5 2	...	
Sholápur	.....	18,711 13 11	18,711 13 11	.....	19,463 10 8	19,463 10 8	751 12 9	...	
Total Disbursers ...	.....	3,61,051 12 8	3,61,051 12 8	1,253 0 9	3,70,215 12 2	3,71,468 12 11	10,417 0 3	...	
Grand Total ...	.....	3,62,610 13 10	3,62,610 13 10	1,253 0 9	3,71,815 12 2	3,73,068 12 11	10,457 15 1	...	

Accountant General's Office, Bombay, Dated 8th September 1893.

No. F./16175

Forwarded to the Conservator of Forests, Central Circle, under Section 267 of the Forest Department Code.

A. F. COX,
Accountant General.

FORM No. 65.

FOREST DEPARTMENT, BOMBAY, CENTRAL CIRCLE.

Financial Results of the year 1892-93.

Division.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL.		REMARKS.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
East Khándesh	39,930	10,310	1,27,307	9,474	56,569	1,67,237	76,353	
West Khándesh	75,625	10,293	1,80,163	10,640	72,394	2,55,788	93,327	
Násik	5,220	2,697	1,09,741	5,214	85,862	1,14,961	93,773	
Ahmednagar	9,292	3,156	51,964	4,130	50,557	61,256	57,843	
Poona	27,452	6,026	69,161	3,734	1,22,517	96,613	1,32,277	
Sátára	30,913	12,501	56,874	3,436	74,793	87,787	90,730	
Sholápur...	2,103	748	37,750	1,220	41,721	39,853	43,689	
Total ...	1,90,535	45,731	6,32,960	37,848	5,04,413	8,23,495	5,87,992	

A. T. SHUTTLEWORTH,
Conservator of Forests, Central Circle.

Poona, 1st November 1893.

No. $\frac{R}{283}$ OF 1894.

REVENUE DEPARTMENT.

Poona, 24th January 1894.

Submitted to Government, with the following remarks.

2. Hitherto, the forest year commenced with the 1st April and ended on the 31st March; but, under orders of the Government of India embodied in Government Resolution, Revenue Department, No. 5506, dated the 6th July 1892, these dates have been altered, and a new forest year, extending from the 1st July to the 30th June, has been adopted for the preparation and submission of Forest Administration Reports. The present report, therefore, covers a period of fifteen months, from the 1st April 1892 to the 30th June 1893. It ought to have been in the hands of Government by the 1st October last. But it was not received in this office till the 9th instant.

Changes in area.—Para. 15, and tables at pages 50 and 51.

3. A small addition of 7,354 acres, or 11 square miles and 314 acres, was made to the total forest area in the Central Circle: 13,384 acres were added to the Reserved Forests; and, on the other hand, there was a reduction of 5,853 acres in Reserved Forests and of 177 acres in Protected Forests. To the increase, East and West Khándesh and Sátára together contributed over 92 per cent. The area of land excluded or transferred from Reserved Forests is highest in West Khándesh, and lowest in Násik. The transfer of lands from Protected Forests appears against Ahmednagar and Sátára alone.

Forest Settlement.—Paras. 16 to 27.

4. The forest settlement and demarcation work, which remained to be done in four tálukas of the Khándesh District, has been completed, except in one táluka. What remains to be done consists of the settlement of claims set up by individuals to forest and waste lands provisionally notified under the Act, and the acquisition of occupied lands, included within forest boundaries, in order to complete the final separation between forests and cultivation. In all the districts (para. 24) except West Khándesh, Násik and Sholápur, fair progress appears to have been made in the matter of acquiring lands under occupation. But, in the Ahmednagar District, no less than 26,524 acres of occupied lands, situated within Reserved Forests, are yet to be acquired (para. 19); and this work will occupy a considerable portion of the Forest Settlement Officer's time still to come.

Demarcation.—Paras. 28 to 31.

5. The work of erecting cairns to define forest boundaries has not yet been completed, though a good deal was done during the period reported on. A length of not less than 1,730 miles was marked off with a total number of 28,123 cairns,—both large and small,—at a cost of Rs. 11,082. The progress made in this respect was most satisfactory in West Khándesh, Násik, and Sátára.

Surveys.—Paras. 32 to 41.

6. The operations of the Forest Survey Branch of the Government of India were carried on in the districts of Poona and Sholápur only. The following table exhibits, in another form, the amount and cost of the work done by the Survey during the survey years 1891-92 and 1892-93:—

Work.	1891-92.			1892-93.		
	Area in square miles.	Cost.	Cost per square mile.	Area in square miles.	Cost.	Cost per square mile.
		Rs.	Rs. a. p.		Rs.	Rs. a. p.
Triangulation	458	2,642	5 12 4	230	3,318	14 6 10
Traversing	23	496	21 9 8	...	...	.....
Topography—						
8″ scale	50·75	6,730	132 9 9	109	15,157	139 0 11
16″ scale	39·82	7,462	187 6 4	21·50	4,080	189 12 3

The cost of topography during the period reported on, on both the 8″ and the 16″ scale per square mile, was Rs. 139-0-11 and Rs. 189-12-3, against Rs. 132-9-9 and Rs. 187-6-4 in the preceding year. As remarked by the Conservator, the difference in the cost is very small.

Prosecutions—Para. 56.

7. During the fifteen months, the total number of cases for trial was 1,524; and, deducting from these 122 cases which were pending trial at the close of the year, 1,402 cases were disposed of, with the result that convictions were obtained in 1,009 cases, and in 393 cases acquittals were recorded. The number of persons convicted and punished was 2,436, against 2,489 in the preceding year; while the number acquitted amounted to 1,267, against 889 in the year 1891-92. The number of prosecutions and acquittals rose from 926 and 220 to 1,177 and 330 respectively, (*vide* para. 58); while the percentage of failures in prosecutions increased from 23·7 to 28·0. As in the previous year, the largest number of prosecutions appears against the Poona District, and the smallest against East Khándesh. There is an increase in the percentage of failures in the case of East Khándesh, Násik, Poona, and Sátára; but an improvement in the case of West Khandesh, Ahmednagar, and Sholápur. Various causes have been assigned to explain the increase in the number of prosecutions. With reference to Khándesh, it is stated that the increase is due to the fact that several cases of evasion of payment of duty on foreign timber, imported into the District, were prosecuted on this occasion, whereas in the preceding year those cases were treated under Section 67. The increase in Poona is attributed to the fact that under Government Resolution No. 8626, dated the 30th November 1892, over 300 cases of trespass by cattle under clause (*d*) of Section 25 of the Forest Act were sent up to Magistrates for trial, instead of being compounded as heretofore. The increase in the percentage of failures is attributed in some cases * * * to erroneous interpretation of the law, and undue leniency, on the part of the trying authorities. How far these explanations may be correct, it is impossible to say, without a scrutiny of the record and proceedings in each case. But the obvious course for the Forest Department, when they believe that there has been a failure of justice, appears to be to bring a few typical cases prominently to the notice of the District Magistrate, in view to his taking such further action as may seem just and proper under the circumstances of each case.

Cases compounded under Section 67.—Paras. 60 to 68.

8. Compositions under Section 67 of the Forest Act were allowed in 9,647 cases during the fifteen months under report. Comparing the figures for two years, as given in para. 62, it appears that the number of compounded cases shows a striking decrease in all the Forest divisions except Poona, where it shews a small increase; and this is no doubt due to the orders issued by Government in 1892, enjoining the exercise of due discretion and caution in settling cases under Section 67. The total number of cases compounded in 1891-92 is put down in para. 61 as 11,825, whereas in para. 62 it is given as 11,313; and, as the year 1891-92 covers in both cases a period of twelve months, it is not understood why the figures should vary as they do. The amount realised from the compounded cases (para. 63) was Rs. 27,019, of which more than 50 per cent. was contributed by Násik and Poona. Rs. 1,209 were paid by way of rewards to persons who helped in the detection of offences (para. 64). The maximum amount of reward was Rs. 18, and the minimum was one rupee. Out of 11,464 cases sent up to the Divisional Forest Officers for consideration under Section 67 of the Forest Act, 9,647 were disposed of by acceptance of compensation, and 1,417 were let off with a warning. Of the cases let off with a warning, a large proportion appears against Násik and Poona. The maximum amount of compensation accepted under Section 67 was Rs. 50 (para. 66); and the minimum was one rupee. More than 47 per cent. of the total number of cases in which compensation was accepted, fell under the one-rupee category.

Fire Protection—Paras. 69 to 78.

9. The figures given in the table embodied in paragraph 69 show that, out of the forest area placed under protection against fire, only 356,773 acres of land were burnt by fire during the fifteen months; against 689,793 in the year 1891-92. This satisfactory result appears to have been brought about partly by the frequent fall of rain between November 1892 and June 1893, and partly by the various preventive measures adopted by the Forest Department (para. 70).

Cattle impounded.—Para. 81.

10. The numbers of cattle impounded in 1891-92, (*a*) for trespassing into closed areas, and (*b*) for grazing without passes in open areas, were 2,02,255 and 1,37,041 respectively. A comparison of these figures with those of the period under report shews that there has now been an increase of 37,873 under the former class, and of 5,290 under the latter. Allowance has to be made for the fact that the figures now reported relate to a period of fifteen months, and have to be compared with the figures for twelve months. And, this allowance being made, there seems to be a decided improvement in the direction of less infringement of the law.

Departmental operations.—Paras. 164, &c.

11. The receipts on account of felled timber amounted to Rs. 1,17,944 during the period under report, against Rs. 1,10,351 in 1891-92. The sale proceeds of fire-wood amounted to Rs. 54,017, against Rs. 37,113 in the previous year, (para. 171). But the realisations on account of other minor produce,—in the districts of Násik, Ahmednagar, Poona, and Sátára, only,—came to only Rs. 18,502, against Rs. 30,021 in 1891-92 (para. 175). The marked decrease in receipts on account of minor produce is attributed by the Conservator (paras. 177 to 179) to the poor and indifferent outturn of hirdas, coupled with smuggling and with the low rates at which the hirdas were sold.

Free grants of timber.—Para. 189.

12. Free grants of timber were made by Revenúe Officers in the districts of West Khándesh, Násik, Poona, and Sátára, to the total amount of Rs. 1,496, against Rs. 1,949 in 1891-92.

Financial Results.—Paras. 194, &c.

13. The following table shows the progress in financial results during the ten years ending with the year under report :—

Year.	Receipts.	Expenditure.	Net Revenue.
	Rs.	Rs.	Rs.
1883-84	9,58,314	5,11,401	4,46,912
1884-85	10,08,725	6,90,087	3,18,637
1885-86	10,37,296	6,63,639	3,73,656
1886-87	9,13,100	6,87,864	2,25,236
1887-88	9,68,625	7,23,135	2,45,489
1888-89	11,60,768	7,27,412	4,33,356
1889-90	11,85,540	7,05,357	4,80,183
1890-91	12,57,501	7,35,704	5,21,797
1891-92	13,62,427	7,17,394	6.45,033
1892-93	8,23,495	5,87,992	2,35,503

Except in the year 1886-87, there has been a steady increase from year to year in the gross receipts, which rose from over nine and a half lákhs in 1883-84 to more than thirteen and a half lákhs in 1891-92. The marked increase in expenditure in 1884-85 is attributable to revision of the superior Forest staff : since then, the expenditure has not risen in proportion to the increase in receipts ; and so a proportionately large increase is noticeable in the figures of net revenue. The apparent decline in the receipts and expenditure of the period under report is due to the splitting up of the old Northern Circle into two circles, called, respectively, the Northern Circle and the Central Circle, and to the transfer of the former to a separate charge, under Government Resolution No. 8315, dated the 22nd October 1892. It would be useful if, in his next report, Mr. Shuttleworth would substitute, for the figures given just above from 1883-84 to 1891-92, separate figures for the Central Circle as it now stands.

14. The report testifies, as usual, to the thorough manner in which Mr. Shuttleworth discharges his duties.

J. F. FLEET,
Commissioner, in charge C. D.

SOUTHERN CIRCLE.

No. 4758 of 1893-94.

From

J. L. L. MacGREGOR, Esquire,
Conservator of Forests, Southern Circle ;

To

The CHIEF SECRETARY to GOVERNMENT,
Revenue Department,
Bombay.

Camp Ratnágiri, November 28, 1893.

Sir,

I have the honour to submit the Forest Administration Report of my Circle for 1892-93, together with its subsidiary statements.

2. I regret the delay in sending the report, which could not possibly be avoided.

3. It is due to the change of the "forest-year," which now ends on June 30 instead of March 31. The financial statements for the forest-year ending 30th June, 1893, required by Section 267 of the Forest Code, were not received from the Accountant General until September 11, 1893, and the report has taken about 9 weeks to pass through the Press.

I have the honour to be,
Sir,
Your most obedient Servant,
J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Through the Commissioner, Southern Division.

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FOREST ADMINISTRATION REPORT OF THE SOUTHERN CIRCLE, BOMBAY PRESIDENCY, FOR THE YEAR 1892-93.

INTRODUCTION.

A new forest year having been introduced under Government Resolution No. 5506 dated 6th July, 1892, results are given in this report for a period extending from 1st April, 1892, to 30th June, 1893.

2. During the year the superior staff was reorganized, and new rules regarding the relations between Revenue- and Forest-Officers were introduced.

3. Under the reorganization of the staff, one Conservatorship was abolished, and the 2nd grade Conservator was reduced to the 3rd grade.

4. The following exhibits the old and the new scale of the upper and lower controlling staff for the whole Presidency:—

Designation.	Old Scale.			New Scale.			Monthly increase.	Monthly decrease.
	Number.	Monthly pay of each.	Monthly total.	Number.	Monthly pay of each.	Monthly total.		
		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
Conservator of Forests, 1st grade	1	1,500	1,500	1	1,600	1,600	100	...
Do. Do. 2nd do.	1	1,250	1,250	...	...	...	...	1,250
Do. Do. 3rd do.	1	1,000	1,000	1	1,100	1,100	100	...
Deputy Conservator of Forests, 1st grade ...	2	900	1,800	3	900	2,700	900	...
Do. Do. 2nd do. ...	3	800	2,400	4	800	3,200	800	...
Do. Do. 3rd do. ...	4	650	2,600	8	650	5,200	2,600	...
Do. Do. 4th do. ...	7	550	3,850	7	550	3,850	...	...
Assistant Conservator of Forests, 1st grade ...	5	450	2,250	4	450	1,800	...	450
Do. Do. 2nd do. ...	3	350	1,050	3	350	1,050	...	...
Do. Do. 3rd do. ...	2	250	500	...	...	...	...	500
Total ...	29	...	18,200	31	...	20,500	4,500	2,200
Sub-Assistant (now Extra Assistant) Conservator of Forests, 1st grade ...	3	200	600	4	350	1,400	800	...
Do. Do. 2nd do. ...	4	175	700	4	300	1,200	500	...
Do. Do. 3rd do. ...	6	150	900	6	250	1,500	600	...
Do. Do. 4th do. ...	...	...	...	5	200	1,000	1,000	...
Total ...	13	...	2,200	19	...	5,100	2,900	...
Grand Total ..	42	...	20,400	50	...	25,600	7,400	2,200
						Net monthly increase Rs. ... or Rs. 62,400 annually.	5,200	

5. Settlement-enquiries were completed for 565 square miles of forests and an additional Forest-Settlement-Officer was appointed for Kánara at the close of the year.

6. Lines of demarcation, separating protected from reserved forest, and aggregating 129 miles in length, were cut and surveyed in the Central and Southern Divisions of Kánara.

7. The Imperial Forest-Survey-Party continued their operations in Kánara and Kolába, and 263 square miles were surveyed at a cost of Rs. 30,631.

8. The work accomplished by the Working Plans' Branch comprised the differentiation and collection of *data* for 19,993 acres of forests in Kánara, at a cost of Rs. 33,991.

9. 589 criminal cases were taken into Court, against 249 in 1891-92, and 909 were compounded by Forest-Officers, against 803 in 1891-92. The increase was satisfactorily accounted for.

10. An appeal was made by one Antáji Támbe from a decision in a case involving the question of the right of Government to teak in occupied *khoti*-lands, and the High Court decided in favour of the *khót*. The circumstances of this case were, however, considered peculiar, and the decision is not, therefore, accepted as a precedent in all cases of a similar nature.

11. Special measures of fire-protection were adopted, and 1,219 square miles were satisfactorily protected.

12. The area closed to all animals was 700 square miles, to browsers 762 square miles, and that open to all animals 3,821 square miles.

13. The number of cattle impounded for trespassing in closed forests amounted to 2,789 as against 4,283 for 1891-92.

14. Natural reproduction was, on the whole, satisfactory in fire-protected areas.

15. The quantity of timber exploited was curtailed because there was a large balance on hand from the previous year's yield, the whole of which could not be sold in that year, owing, apparently, to the poor demand consequent on the agricultural distress that prevailed in parts of the Southern Marátha Country.

16. The myrobollam-collection of the year under report was very poor, owing to the crops having been spoiled by October-rains.

17. The financial results of the year were, on the whole, favourable. Both the gross and net revenues of the year 1892-93 were larger than those of the year before. The receipts of the period under report (April 1, 1892, to June 30, 1893) amounted to Rs. 13,84,371 and the charges to Rs. 8,19,142.

This is the first report submitted to Government under the revised Forest-Code, in which a more elaborate account than that prescribed under the older form is contemplated. The consequence is that I have exceeded the limit of 20 pages.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i). ALTERATION OF AREA.

(ii). FOREST SETTLEMENTS.

18. The following table shows the forest-area of the Southern Circle for 1892-93 :—

District.	Area on 1st April 1892.		Added during the year.		Excluded or transferred to other heads.		Area on 30th June 1893.		Total Forest area.
	Reserved.	Protected.	Reserved.	Protected.	Reserved.	Protected.	Reserved.	Protected.	
	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.
Kánara	754 78	2,793 357	0 504	1 333	0 128	0 421	754 454	2,794 269	3,549 83
Belgaum	494 362	196 572	...	...	...	...	494 362	196 572	691 294
Dhárwár	171 410	260 258	...	...	...	...	171 410	260 258	432 28
Bijápur	155 76	89 409	...	...	...	...	155 76	89 409	244 485
Kolába	381 286	63 582	...	0 6	...	...	381 286	63 588	445 234
Ratnágiri	20 80	.....	...	...	...	...	20 80	.....	20 80
Total ...	1,977 12	3,404 258	0 504	1 339	0 128	0 421	1,977 388	3,405 176	5,382 564

19. 504 acres were "Reserved," and 1 square mile 333 acres "Protected," in Kánara; 6 acres were added to the "Protected" forests in Kolába while 128 acres and 421 acres were, respectively, disforested in the "Reserved" and "Protected" forests of Kánara, owing chiefly to mistakes in the original lists, which were rectified.

Kánara.

20. Mr. Sheppard, I. C. S., continued to be Forest-Settlement-Officer, Kánara, and completed the field-work connected with 7 villages of Kárwár and 168 of Sirsi, having a forest area of 23·59 square miles and 431·28 square miles, respectively. The final reports on these forests will, it is expected, be sent in during the present season.

21. Two Settlement-Officers were posted to Kánara, on Mr. Wingate's return from furlough, on the 31st May 1893.

22. The following area was notified under Section 4 of the Forest-Act :—

Acres.	Gunthas.	
601	7	in Ankola.
445	15	in Kárwár.
155,388	2	in Sirsi.
4,557	11	in Kumta.
1,999	29	in Yellápur.

Belgaum and Dhárwár.

23. In Belgaum, no field-work remained to be done. The orders of Government on previous reports have been received since the close of the year.

24. In Dhárwár, the Settlement-Officer reports that he finished the field-work, connected with the conversion into "Reserved", of the "Protected" forests of Dhárwár, Gadag, Karajgi and Bankápur, aggregating 111·8 square miles, and submitted a report on Dhárwár (22 square miles).

25. Mr. Knight further says that he would have been able to do more, but that his time during the travelling-season was cut short, firstly, by an accident in December that detained him at head-quarters for the whole of January, and, secondly, by his deputation to Bijápur in March, which detained him there for nearly 6 weeks.

Bijápur.

26. The settlement was delayed for want of maps. These are now ready for submission together with the final reports.

27. The following table shows the state, at the beginning and end of the year, of the settlement of the forests which were gazetted under Section 34 of the Forest-Act :—

Name of Collectorate.	Class of Forests.	At the commencement of the year. Areas under Section 34 in which private rights have not been enquired into, settled or recorded.	Areas dealt with during the year and sanctioned by Government. Under Section 19, Chapter II of the Forest Act.	Areas dealt with during the year and sanctioned by Government. Under Section 28, Chapter IV of the Forest Act.	Area of Reserved Forests alienated under Section 26.	Area of Protected Forests disforested under Government orders.	At the end of the year. Areas under Section 34 in which private rights have not been enquired into, settled or recorded.
		Sq. m. a.	Sq. m. a.	Sq. m. a.	Sq. m. a.	Sq. m. a.	Sq. m. a.
Kanára	Reserved	214 286	....	....	....	....	214 286
	Protected	2,342 611	....	....	....	....	2,342 611
Bijápur	Reserved	155 76	....	....	....	....	155 76
	Protected	89 409	....	....	....	....	89 409
Kolába	Reserved	11 353	....	....	....	....	11 353
	Protected	.....	....	....	....	....	....
Total ..	Reserved	381 75	....	....	....	....	381 75
	Protected	2,432 380	....	....	....	....	2,432 380

28. Government have passed orders on the settlement-reports on the Ankola (61 $\frac{633}{640}$ square miles), Yellápur (351 $\frac{49}{160}$ square miles) and Kumta (140 $\frac{23}{320}$ square miles) Forests (Government Resolutions No. 1140 of 9th February, 1893, No. 4350 of 17th June, 1893, and No. 6244 of 29th August, 1893). The Forest-Settlement-Officer's proposal to classify the areas partly as "Reserved" and partly as "Protected," was not accepted, and he has been directed to submit revised lists reserving the whole area.

29. The area remaining to be dealt with is :—

	Sq.m.	a.
In Kánara 2,557 square miles 257 acres (given in the table in paragraph 27 above) *minus* 553 square miles 235 acres referred to in the last paragraph	2,004	22
In Kolába	11	353
In Dhárwár (area to be converted into "Reserved") ...	266	286
	2,282	21

30. The settlement of the Belgaum-Forests, referred to in the 35th paragraph of the Administration-Report for 1891-92, has been sanctioned (see paragraph 23 above).

31. As regards the 11 square miles 353 acres of Kolába, the Collector writes that the settlement can be effected on receipt of orders on reports submitted by him.

32. In Bijápur, the state of the settlement-work is the same as that reported in paragraph 36 of the last Administration-Report.

33. Now that two Settlement-Officers have been appointed to Kánara, it is hoped that the settlement-work will advance rapidly.

34. The expenditure incurred on account of settlement during the period under report, amounted to Rs. 37,544, as shown below :—

Not charged to Forests.

	Rs.	Rs.
Salaries and allowances of Forest-Settlement-Officers,		
Kánara	12,325	
Do. do. Belgaum-Dhárwár ...	16,125	
		28,450

Charged to Forests.

Salaries and allowances of the establishments employed under the Forest-Settlement-Officer, Kánara, and contingencies	3,500	
Do. do. Belgaum-Dhárwár ...	3,633	
		7,133
Compensation ...		1,961
Total ...		37,544

35. The settlement of the year, which is represented by the above expenditure, comprises 565·95 square miles of the area for which field-work has been completed. The cost per square mile of settlements, effected during the year, comes to Rs. 66·3.

36. The total cost for settlement-operations up to 31st March, 1892, amounted to Rs. 2,86,574, and that incurred during the year under report was Rs. 37,544. The average cost of settlement up to date comes to Rs. 133·6 per square mile.

37. The settlement of the *Bet*-question is much to be desired. A Committee composed of Messrs. Betham, Sheppard and Lamb sat at Sirsi in January last, and submitted a report on the subject, which was forwarded to the Commissioner in April.

(iii). DEMARCATION.

(iv). SURVEYS.

38. The demarcation-establishment under the Forest-Settlement-Officer, Kánara, completed the clearing and survey of lines dividing the Protected from the Reserved forests, of Sirsi, which were settled during the previous year. The lines surveyed and demarcated, aggregated 107 miles $7\frac{3}{4}$ furlongs.

39. Field-books showing particulars of the survey and of boundary-marks for 22 villages of Sirsi, as well as maps, were prepared for the use of the village- and Forest-Officers.

40. Twenty-one miles of 30-feet lines, dividing Protected from Reserved forests, were also cleared in the Ankola sub-division of Kánara, and one mile in Mundgod under the supervision of the Forest-Officers. The average cost per mile amounted to Rs. 45.

41. The cost of demarcation amounted, in all, to Rs. 5,243.

42. Excepting for the forests of Kolába and Ratnágiri, exterior boundary-marks are erected and maintained by the Revenue-Department, the Forest-Department paying its share of expenses.

43. The Forest-Survey-Party continued the topographical survey of the Sirsi-forests in the Southern Division of Kánara. During the survey-year ending 30th September, 1892, the details for 195 square miles, on a scale of 4 inches =one mile, were completed at a cost of Rs. 16,657. The triangulation of 200 square miles and traversing of 295 square miles cost Rs. 9,951. The cost incurred, in all, was Rs. 26,608. The cost per square mile of completed area amounted to Rs. 85 for work done on the 4-inch-scale.

44. Sixty-eight square miles were also surveyed, in Kolába, on the 8″ scale, at a cost of Rs. 13,974, or of Rs. 205 per square mile.

45. The *average* cost per square mile of the area surveyed during 1892-93 was Rs. 116.

46. The area completed during the year 1891-92 was 300 square miles on the 8″-scale at a cost of Rs. 35,138. The average cost per mile was, therefore, Rs. 112 against Rs. 205 in 1892-93. The falling-off in the area completed during the past year is attributed by Colonel Hutchinson, the Superintendent, to sickness among the surveying-establishment. It, also, seems that his Assistant was engaged in triangulation in Kánara almost until the close of the year and that, in consequence, he was not available to superintend detail-work elsewhere.

47. The following shows the approximate area already surveyed and that remaining to be surveyed in the several Divisions of the Circle :—

Division.	Area surveyed.	Area remaining for survey.
	Sq. Miles.	Sq. Miles.
Northern Division, Kánara	627	562
Central Division, Kánara	395	677
Southern Division, Kánara	233	1,055
Belgaum	.....	691
Dhárwár	103	329
Bijápur	.....	245
Kolába	84	361
Ratnágiri	.....	20
Total ...	1,442	3,940

48. The survey was commenced in 1886. Since then, the average outturn per annum has been 206 square miles.

49. To complete the special survey of the forests of the Circle, at an average annual rate of progress of 300 square miles, would take 13 years, and the cost would be about Rs. 4,00,000. The survey-charges are a heavy drain on the forest-revenue, and at least double what they would be if details, in the survey of forests of minor importance, not required for forest-purposes, were left out.

50. Appendix in Form 49 of the Forest Code shows the areas surveyed and under survey during the year under report.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—REGULATION OF MANAGEMENT.

(*a*) Working-Plans and their Control.

51. During the rains, both Working-Plans' parties remained in charge of Mr. Hodgson. From the beginning of the working-season, in November, until December 13, Mr. Murray was in charge of Party I in addition to his duties as

Divisional Officer, Belgaum. During that period, the work of the Party was confined to marking off the inexploitable portions of the area, in Belgaum, from which fuel is obtained for the Southern Mahratta Railway. After clearing and surveying 65 miles of 5-feet rides round the inexploitable portions of this area, and after surveying the *coupes* already exploited, the Party proceeded on February 9 to Sámbráni, in the Northern Division of Kánara, with Mr. Mainwaring, who, on his return from furlough, was placed in charge of the Party.

52. At the beginning of the working-season, in November, Mr. Hodgson was directed to take up the teak-forests of Gund with Party II. On March 4, after collecting the *data*, and forming and surveying compartments for 9,888 acres of the Gund-series, as the Party was suffering severely from sickness, the completion of that series was deferred, and Mr. Sátáráwálá, with two surveyors and a forester, was despatched to Kolába to mark off *coupes* of the Karjat and Khálápúr Working-Plans; this work occupied them until the end of the season. At the same time, Mr. Hodgson was deputed to assist Mr. Mainwaring in the Supa-táluka of Kánara. He joined that officer at Tátwhál on March 5, and remained with him until the end of the season.

53. The work accomplished by No. II Party during the year was, therefore, the examination, formation of compartments, and collection of *data* necessary for the preparation of a plan, for 9,888 acres in Gund. Also the marking-off of *coupes* in Khálápur and Karjat as laid down in the working-plan for those Ranges for 1892-93.

54. The work done by Mr. Mainwaring's Party, No. I, assisted during March, April and May by Mr. Hodgson, including the survey-work in Belgaum already referred to, was the differentiation and examination of the Addígeri-series of 10,105 acres, the examination of the Singatgeri-series of 17,562 acres, and of Dándéli-series of 15,383 acres. The breaking-up of the area into compartments (differentiation), and the taking-up of test-areas for the two latter series had been previously carried out. Mr. Mainwaring reports that plans for the working of these 3 series will be prepared during the present rainy season (1893).

55. The statement in paragraph 41 of last year's report is not quite correct. The figures in column 10 show the area for which compartments were formed and enumerations made, but no working-plan had been formed for that area. The heading of the column should have been "area for which *data* for the preparation of working-plans have been collected."

56. Last season's progress was retarded by several circumstances, notably the increase in the proportion of area enumerated to total area dealt with: the increase was the difference between 8 per cent. and 25 per cent. Other retarding circumstances were sickness in the ranks of both parties, changes of Divisional Officers in charge, absence of one Divisional Officer from 12th April until 11th November, 1892, absence for 2 months of part of Party II in Kolába, and want of experience of both Divisional Officers. Mr. Hodgson only joined the service in December, 1890, and was put in charge of Party II in April 1892. Mr. Mainwaring only took over charge in December, when he was quite new to the work and the district; he also suffered from illness.

57. The area for which working-plans have been submitted is 78,317·46 acres. Mr. Bell has submitted a report for 63,569 acres, and Mr. Hodgson one for 14,748 acres. Both these plans had to be returned for revision and resubmission during the current rainy season (1893).

58. The work done in the Circle, up to date, is, therefore, as follows:—

(1) Area for which plans have been submitted, but which are now being revised—78,317 acres.

(2) Area, not noted under (1) for which all the *data* have been collected, and for which plans are to be submitted by the end of the monsoon (1893)—43,052 acres.

(3) Area not included under (1), or (2), but which has been split up into compartments and for which the *data* necessary for framing a plan have been collected (Gund)—9,888 acres.

(4) Area not included under (1), (2) or (3), which has been split up into compartments—20,994 acres.

59. The total area dealt with, including that under (4), is 151,244 acres. The total cost up to date has been Rs. 121,999, and the cost per acre Rs. 0-12-9.

60. To the above must be added the areas in Khálápúr and Karjat for which working-plans have been prepared. These areas aggregating 48,797 acres were handed over from the Northern Circle on the 1st November, 1891.

61. The result of last year's working was:—

	Lines 10'—15' broad.			Linear miles surveyed.	Posts fixed.	Test-trees felled.	Number of compartments formed.	Test-area estimated.	Area for which *data* for the preparation of working-plans were collected.	Total cost incurred.	Cost per acre.
	Cleared of re-growth, &c.	Jungle cut and cleared.	Total cut and cleared.								
		Miles.	Miles.	Miles.	No.	No.	No.	Acres.	Acres.	Rs.	Rs. a. p.
Party I	...	100·12	100·12	105·82	352	82	19	2,708·31	10,105·7	20,238	
Party II	...	40·427	40·427	43·7	784	77	18	937·85	9,994·6	13,753	
								Total...	20,100·3	33,991	1 11 ½

62. The causes of the abnormal increase in cost have been referred to above. The increase in the proportion of test-area to total area examined was, in my opinion, excessive, and need not be continued.

II.—WORKING OF THE YEAR.

(*a*). Communications and Buildings.

63. Form 51 shows the various works constructed during the period under report. The outlay on communications amounted to Rs. 2,353, and on buildings to Rs. 6,268.

64. In the Northern Division of Kánara, a drive 500 feet long, connecting the Haliyál timber-depôt with the main road, was made at a cost of Rs. 261. Two wells were constructed, one in the Haliyál-depôt and the other near the Sámbráni watch-house, for Rs. 300 each. Repairs to existing forest-roads were made (Rs. 249) and to existing watch-houses and other forest-buildings (Rs. 307).

65. In the Central Division of Kánara, the Kannigeri-Udámaki forest-road was repaired and extended by 1·06 miles (Rs. 200). One new forest watch-house was built for Rs. 300, and old watch-houses were repaired (Rs. 1,648). The well at Wadgatti was completed (Rs. 202) and Rs. 384 spent on deepening the well at Kolikeri.

66. In the Southern Division of Kánara, Rs. 507 were spent on repairs to forest watch-houses, &c. Two wells were constructed at a cost of Rs. 340, and the well in the Singanhalli-timber-depot completed (Rs. 149).

67. In Belgaum, repairs to the Halshi-Nágargáli forest-road cost Rs. 1,056, and to guard-and rest-houses Rs. 483.

68. In Dhárwár, a depôt-house was built for Rs. 999.

69. In Kolába and Ratnágiri, the expenditure under this head was confined to repairs (Rs. 146).

(*b*). Protection of Forests from Injury.

(1). *General Protection and Breaches of Forest Law.*

70. The following statement shows the number of prosecutions for breaches of Forest Rules during the years 1891-92 and 1892-93 :—

Divisions.	Cases of year 1891-92.							Cases of year 1892-93.							Percentage of failures.	
	Pending in Court on 1st April 1891.	Taken into Court during the year.	Total.	Disposed of by Magistrates during the year.			Pending in Court on 31st March 1892.	Pending in Court on 1st April 1892.	Taken into Court during the year.	Total.	Disposed of by Magistrates during the year.			Pending in Court on 30th June 1893.	1891-92.	1892-93.
				Convictions.	Acquittals.	Total.					Convictions.	Acquittals.	Total.			
Northern Division, Kánara	...	21	21	10	11	21	...	...	119	119	68	48	116	3	52	41
Central Division, Kánara	...	20	20	16	4	20	...	...	18	18	10	8	18	...	20	44
Southern Division, Kanára	1	6	7	5	2	7	...	...	100	*100	83	7	90	...	28	8
Belgaum	4	36	40	27	12	39	1	1	141	142	126	14	140	2	31	10
Dhárwár	...	7	7	6	1	7	...	...	29	29	18	9	27	2	14	33
Bijápur	1	8	9	8	...	8	1	1	14	15	14	1	15	...	...	7
Kolába	5	122	127	103	19	122	5	5	133	138	102	32	134	4	16	24
Ratnágiri	...	29	29	21	7	28	1	1	35	36	17	18	35	1	25	51
Total ...	11	249	260	196	56	252	8	8	589	597	438	137	575	12	22	24

* Ten cases were withdrawn, as the accused died.

71. A large number of cases was instituted in the Northern Division of Kánara, where, in no less than 101 cases, people, in spite of warnings, were caught in the act of taking firewood from the closed area, within the 5-miles-radius round Kárwár. Of these, 45 were dismissed by the Magistrate on the ground that they were "first offences," and in 56 cases the offenders were punished. In regard to these convictions, the Collector remarks that "the punishments do not seem to have been deterrent, as the offence is still, I am sorry to notice, most prevalent in the neighbourhood of Kárwár."

72. Only 14 cases were tried in connection with offences committed in the important forests of the Supa- and Haliyál-ranges, from which all the valuable timber of the Northern Division is obtained. Of these, 8 were cases of incendiarism; and, in 6 out of the 8, convictions were obtained, the offenders in each case getting off with fines. The remaining cases in the Northern Division call for no remark.

73. If it were not for the cases that occurred inside the 5 miles' limit round Kárwár, which concerned only a very small community, the increase in the number of cases that occurred in this Division would call for no remark. It was no doubt necessary to take these cases into Court, as the thieving of wood for sale that goes on in the neighbourhood of Kárwár, and a few other large towns in the vicinity of forests, cannot be arrested by other means.

74. In Belgaum, there was an increase of 105 cases. This is reported to have been entirely due to illicit grazing in the Khánápúr- and Gokak-ranges. In the Khánápúr-range, there were 79 prosecutions for grazing cattle in areas closed for regeneration. Most of the people concerned in these cases were professional graziers *(gaulis)*, and cartmen employed by fuel-contractors, many of whom had been previously punished for similar offences, besides being personally warned by the Divisional Officer.

75. Under the circumstances, it appears that the Divisional Officers of Belgaum and the Northern Division of Kánara could not have acted differently, and the large decrease in the percentage of failures in Belgaum tends to show that the cases there were carefully considered before being taken into Court. The increased percentage in the Northern Division of Kánara is accounted for by the number of cases dismissed in Kárwár, not because proof was wanting, but because the offenders were brought up for trial for the first time.

76. The Divisional Officer, Belgaum, reports that the practice of grazing cattle in areas closed for regeneration was becoming so common in spite of warning, impounding, and compounding, that nothing but prosecution remained to be tried. Sixteen cases of this kind occurred at Nágargáli within the space of 2 months, all the offenders belonging to a small settlement of *gaulis* residing there.

77. In Central Kánara, the percentage of failures was high, but, as the number of cases is small, the percentage is not a very safe guide to the degree of care and judgment exercised by the Divisional Officer in undertaking prosecutions. The Divisional Officer reports that the 6 cases that failed in Yellápur concerned the illicit cutting of *ráb*, and that they were dismissed by the Subordinate Magistrate, because he considered them trivial.

78. It is not easy to say exactly where to draw the line in cases of this kind. Most *ráb* cases are, in themselves, trivial, as regards the value of the produce stolen, and there is a natural reluctance on the part of Magistrates to convict. The degree of culpability of the offenders depends, however, on the persistence with which they and their neighbours carry on illicit loppings and cuttings (for garden-owners do not confine their depredations to leaves, or even small branches). In committing offences of this nature, the garden-proprietors of the Central and Southern Divisions are most persistent, and the collective and cumulative damage done to the forests is serious and extensive. If these 6 cases had not failed, the percentage of failures in the Central Division would have been reduced to 11⅓.

79. There were 7 cases in Ratnágiri more than in the previous year, and the percentage of failures increased 26 per cent. The increase in the number of cases is due, the Divisional Officer reports, to the failure of warnings and compoundings in previous years and the necessity of resorting to prosecution to stop illicit *ráb*-cutting. The increased percentage of failures is ascribable, in a great measure, to the uncertainty of the law in regard to the rights of occupants in reserved trees. Even in cases in which the accused admitted having cut down reserved trees, the Magistrate acquitted them on the ground that the trees were not the property of Government. The adverse decision of the High Court in the Támbé-case, in which it was ruled that, under Dunlop's proclamation, Government renounced all rights in reserved trees on occupants' lands, must naturally guide the decision of the lower Courts in similar cases. In order to settle the question, steps have been taken to carry out the instructions conveyed in Government Resolution No. $\frac{4227}{60-\text{Confl.}}$ dated 13th June, 1893.

80. A large increase (83) occurred in the number of cases taken into Court in the Southern Division of Kánara. The Divisional Officer reports that it is due to the large number of cases of *soppu* (green leaves, &c., for manure) that occurred. The percentage of failures fell from 29 to 8.

81. In justification of the increase, the Divisional Officer remarks that, in the Siddápur taluka, the jungles have been already destroyed, to a great extent, by garden-cultivators, a statement which is quite true.

82. Appendix 52A shows details of cases of misappropriation of timber and other produce, as required by Government-Resolution No. 7232, dated 12th September, 1892. Appendix 52B shows datails of cases compounded under Section 67 of the Forest Act.

83. The cases dealt with under Section 67 of the Forest-Act were :—

Divisions.	1891-92.				1892-93.			
	Total number of cases disposed of.	Number of cases commuted.	Number of cases discharged.	Amount of compensation recovered.	Total number of cases disposed of.	Number of cases commuted.	Number of cases discharged.	Amount of compensation recovered.
				Rs.				Rs.
Northern Division, Kánara	8	8	...	49	15	13	2	89
Central Division, Kánara	61	60	1	197	22	20	2	103
Southern Division, Kánara	45	45	...	91	4	4	...	53
Belgaum	210	210	...	351	475	475	...	580
Dhárwár	65	65	...	180	37	37	...	83
Bijápur	49	49	...	215	83	83	...	188
Kolába	167	167	...	546	154	154	...	871
Ratnágiri	199	199	...	587	126	123	3	612
Total ...	804	803	1	2,216	916	909	7	2,579

84. Belgaum shows an increase of 265 cases, Bijápur 34, and the Northern Division, Kánara, 5.

85. The large increase in Belgaum was due to offences on account of firewood removed from forests without permit. There were 317 cases in which people, (principally *Lamánís*) who live by collecting and selling firewood under the permit-system, were detected in the act of taking wood, without permits, for sale in towns.

86. Mr. Murray attributes the increase to greater activity on the part of the protective establishment. The fees levied by the Forest-Department are very light (1 anna for a man's load, 9 pies for a woman's, and 6 for a child's), and there is, therefore, no excuse for evading payment; compounding cannot, therefore, be considered a severe mode of dealing with such cases.

87. The compensation, accepted in Belgaum, was light. If the 3 cases involving compensation of Rs. 50, Rs. 60 and Rs. 103 be deducted, there remain Rs. 367-14-3 to be divided amongst 472 cases, or an average of 12½ annas each; and of the total number (475), 417 cases came under the category "Re 1, or under".

88. The increase in the number of cases compounded in Bijápur has not been satisfactorily accounted for by the Divisional Officer, who, as yet, knows nothing of the district. The Collector expresses the opinion that there is no ground for complaint with regard either to the institution of prosecutions, or the working of Section 67 of the Act.

89. In the Northern Division of Kánara, the total number of cases came to only 13, which is a very small number for the largest and most important Division of the Circle.

90. The number of cases in which damages amounting to one rupee, two rupees, and so on, up to the maximum, were recovered under Section 67 of the Forest-Act, is given in Appendix 52C.

91. Appendix 52 shows the number of cases compounded and taken into Court during the period under report. The following shows the figures for 1891-92 and 1892-93 :—

Division.	Taken into Court.		Compounded under Section 67.		Total number of cases.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Northern Division, Kánara ...	21	119	8	13	29	132
Central Division, Kánara ...	20	18	60	20	80	38
Southern Division, Kánara ...	6	100	45	4	51	104
Belgaum	36	141	210	475	246	616
Dhárwár	7	29	65	37	72	66
Bijápur	8	14	49	83	57	97
Kolába	122	133	167	154	289	287
Ratnágiri	29	35	199	123	228	158
Total ...	249	589	803	909	1,052	1,498

92. *Civil Suits.*—An important appeal from the decision of a Subordinate Magistrate was made, in the High Court, by one Antáji Keshav Támbé of Asgo'li, bearing on the question of the right of Government to teak-trees in occupied khoti lands in Ratnágiri. The High Court decided against Government. This decision and its effects on protection have been already referred to above; it is not considered to be generally conclusive, and the general question regarding the rights of occupants has still to be decided.

93. The increase in the number of cases compounded, or brought into Court, was, in some degree, due to the fact that the period now under report comprises 15 months, while the figures for 1891-92 were only for 12 months.

(2). *Protection from Fire.*

94. The usual operations under this head were carried out, and a larger area was fire-traced in all Divisions excepting that of Northern Kánara.

95. The results of the year under report compare favourably with those of the year before, except as regards the cost, which has increased from 16·4 to 19·34 rupees per square mile.

96. The following table shows the results for each Division :—

Division.	Area in Square Miles.			Proportion of failures to area attempted.	Cost.		Proportion of area under fire-protection to total area of Reserves.
	Attempted	Failures.	Protected.		Per square mile protected.	Per acre protected.	
Northern Division, Kánara	509·93	·84	509·09	·17	24·64	7·3	...
Central Division, Kánara...	184·29	3·69	180·6	2·00	39·04	11·7	...
Southern Division, Kánara	73·30	1·78	71·52	2·42	11·55	3·46	...
Belgaum	256·07	3·45	252·62	1·3	7·21	2·16	...
Dhárwár	56·43	5·22	51·21	9·25	12·71	3·81	...
Bijápur	45·31	·08	45·23	·17	11·05	3·31	...
Kolába	92·43	4·13	88·30	4·46	2·04	·61	...
Ratnágiri	20·13	·01	20·12	·05	·44	·13	...
Total in 1892-93 ...	1,238	19	1,219	1·53	19·34	5·8	62·6
Total in 1891-92 ...	1,046	25	1,021	2·39	16·14	4·8	53·2
Increase or Decrease in 1892-93 ...	+192	−6	+198	−·86	+3·2	+1·0	+9·4

97. The most successful, and at the same time cheapest, operations were carried out in Ratnágiri. No doubt the marked success attained there is due to the fact that cattle are excluded from the forest-area and the people have less inducement to set fire to the jungles there than in other parts of the Circle.

98. The cost per square mile in the Central Division, Kánara, has increased from 21·15 to 39·04 rupees. The Divisional Officer has given no satisfactory reason for the increased cost of protection.

99. The cost of operations in the Northern Division, Kánara, also increased from 18·89 to 24·64 rupees, and for this the Divisional Forest-Officer gives no reason.

100. In the Southern Division, Kánara, the expenses were reduced one-half.

101. In Belgaum, the area specially protected was increased from 170 to 252 miles Unfortunately, great damage was done in the areas closed for regeneration in the Railway-fuel-reserve. The Divisional Officer reports that there is every reason to believe that several of the fires were purposely caused, but the offenders could not be traced. With reference to the areas burnt in the Railway-fuel-reserves, the Divisional Officer adds, " the harm caused by a fire in fuel-cuttings is out of all proportion to that done in ordinary open forest. In the former a large portion of the young growth is completely destroyed, its place being taken by new shoots several years in retard of the age of the unburnt portion. When the plants are not completely destroyed, their leaves are burnt up and not replaced until the ensuing year, whereby a whole year's growth is lost. Unless some special penalty can be imposed upon the villagers, it is doubtful whether any departmental measures will ever be sufficient to check these fires, which render any attempt at a systematic plan of working the fuel-forests absolutely futile."

102. The forests, referred to in the above quotation, which extend to 45,000 acres, are extremely valuable and give an annual nett yield of about Rs. 2-12-0 per acre. With proper protection, they could be made to yield in the course of the next 30 years a much larger

income. The Collector remarks, in connection with this matter, that "probably, as the relations between the Department and the villagers improve, wilful damage of this kind will tend to become less frequent," but that "it is impossible to propose special penalties unless a series of offences is clearly brought home to them." Unfortunately, if it is considered necessary to bring home to individuals the fires they have caused, a series of offences cannot be established, as the experience of several years shows. As regards the relations of the villagers to the Forest-Department, I do not think that they are bad, or that improvement can be looked for in that direction; it is quite natural that they should set fire to the jungles, as long as it is to their immediate interest to fire them and they can do so with impunity. Their object in firing the forest is (1) to induce an early and good crop of grass, (2) to kill trees and so open out the jungle and increase the crop of grass, (3) to obtain manure for their fields in the ash washed down from the forest and (4) to clear the ground for sporting purposes.

103. The following areas are estimated to have escaped fire without adoption of special measures:—

	Acres.
Northern Division, Kánara	507,345
Central Division, Kánara	400,467
Southern Division, Kánara	773,225
Belgaum	277,612
Dhárwár	239,598
Bijápur	127,455
Kolába	224,003
Ratnágiri	10,365
Total	...2,560,070

104. The area reported as having escaped fire without the taking of special measures amounted to 3,982 square miles, or 74 per cent. of the whole area, during 1891-92. During the year under report, it amounted to 4,000 square miles, or 74·3 per cent. of the whole area.

105. *Northern Division of Kánara.*—In the Haliyál- and Supa-forests, protection is reported to have been very successful. Eleven fires took place in Haliyál, in one of which the offenders were traced. These fires were quickly extinguished, and only a small area was burnt. In Supa, 13 acres were burnt. The offender was prosecuted and fined Rs. 5. Three other fires also occurred, but no trace of the offenders could be found.

106. *Central Division of Kánara.*—The Divisional Officer reports that protection from fire in the Yellápur-and Mundgod-ranges was very successful, but that in Ankola a larger area was burnt than that burnt in 1891-92. The number of fires observed was 68. No offenders were traced.

107. *Southern Division of Kánara.*—In the reserved forests which were protected by fire-lines, 1,344 acres are said to have been burnt. The origin of the fires that occurred has in no case been discovered. The number of cases in which fire was brought to notice was 35.

108. *Belgaum.*—Here, fire-protection has, it is reported, been on the whole eminently successful, although the number of fires was 99 against 64 of the year before.

109. The great damage done in the fuel-reserves in the Khánápur range has already been alluded to.

110. *Dhárwár.*—The area protected was practically the same as that protected in the preceding year. In the specially-protected areas, about 5 square miles are shown to have been burnt. The Divisional Officer attributes the origin of the fires to carelessness on the part of travellers in throwing into the jungle lighted *bidis* and torches, but this cause cannot satisfactorily account for all the fires that occurred. The number of cases in which fires were discovered was 33. No offenders were detected.

111. *Bijápur.*—The closed forests of Bádámi and Bágalkot were specially protected. It is said that only 51 acres were burnt.

112. *Kolába.*—In Kolába, special protection appears to have been very satisfactory; the area attempted is not, however, large enough.

113. *Ratnágiri.*—Here the results were eminently satisfactory.

(3). *Regulation of Grazing and Protection from Cattle.*

114. Under the rules sanctioned in Government Resolution No. 3595, dated 23rd May, 1890, grazing is permitted in the unclosed portions of forest.

Villages which have contributed *gáirán* to the formation of a forest-block are allowed free grazing in the open forest of that block, for all their agricultural cattle. Other village-cattle belonging to cultivators are charged fees varying, according to species, from 1-8 annas a head. Double fees are charged for outside cattle, and to those belonging to professional graziers.

115. The above rules apply to all districts, excepting Kánara, where an uniform rate of 2 annas is charged on all cattle, belonging to villagers other than *gaulis*, that are grazed in open forests; one rupee a head is charged for cattle belonging to professional graziers, and to persons not residing in Kánara.

116. Appendix 54 gives details of areas closed to horned cattle and browsers, as well as those left open for grazing.

117. The area closed to all animals amounted to 700 square miles, to browsers to 762 square miles, and that open to all animals to 3,821 square miles.

118. It should, however, be noted that in the greater part of Kánara there are no browsers, although the forests have not been closed to them. The only browsers that prey on the forests of this circle are sheep and goats. It is satisfactory to see that the raising of the fee for grazing sheep and goats in the Parasgadtáluka of the Belgaum-Division has reduced the number of these animals grazed in the forests from 74,155 to 35,582 without giving rise to complaints. Inám-forests and those belonging to Native States, which are dotted over the Belgaum-district, afford a means to our villagers of providing their browsers with cheaper grazing than that now available in the Government-forests of that district.

119. The area, closed to grazing in 1891-92, was 454.96 square miles. During that year, large areas were thrown open owing to the prevailing scarcity of fodder in the plain-districts.

120. From experience of the general famine in 1876, and the fodder-famine in 1891, I consider that, in times of scarcity, very little good is gained by opening closed areas to cattle in these districts. In the dry zone, whenever the rain is insufficient to produce agricultural crops, it is also insufficient to produce grass-crops, and during the cold and hot months the dried-up leaves of trees in the forest are useless as fodder. In the moist zone, a fodder-famine never occurs, but on the occurrence of one in the Eastern districts, cattle are sooner or later sent west in search of grazing grounds. They are generally in a very debilitated state on arrival in Kánara, and die like flies, and those that do survive a short time are hurried back to their own country before the scarcity has disappeared. The damage done by the influx of thousands of cattle into the jardinaged forests of Kánara is of course considerable, and of doubtful utility considering the small benefit, if any, derived by their owners from the concession. The latter have a great dread of sending their animals to Kánara and put off sending them there until they have become so starved as to be unable to undergo the fatigues of a long march. For this reason, probably, many of the animals succumb to contagious disease, which is communicated to the local cattle.

121. It may, therefore, be doubted if life is really saved by the opening of closed areas in time of famine, while it is certain that much damage is thereby caused in the famine-tract by the eradication of all the good that has occurred to the forests closed for several years preceding the scarcity. It even seems probable that the effect, if any, of opening closed areas in a famine-year is the reverse of that desired, as the concession may have a tendency to induce owners to put off sending their cattle to better grazing-grounds until the animals are too weak to stand the journey and the altered conditions of climate and fodder in the moist zone. If cattle are sent to the moist zone, they should be sent there not later than the beginning of September.

122. The number of animals impounded during the period under report and during the previous year in open and closed forests, is given below :—

Division.	Number of Animals impounded during 1891-92.			Number of Animals impounded during 1892-93.		
	In open forests.	In closed forests.	Total.	In open forests.	In closed forests.	Total.
Northern Division, Kánara ...	...	173	173	...	207	207
Central Division, Kánara ...	346	194	540	129	417	546
Southern Division, Kánara ...	121	122	243	76	43	119
Belgaum	1,892	1,239	3,131	3,178	1,750	4,928
Dhárwár	686	1,680	2,366	...	...	...
Bijápur	1,279	...	1,279	...	...	...
Kolába	...	763	763	593	...	593
Ratnágiri	119	112	231	...	372	372
Total ...	4,443	4,283	8,726	3,976	2,789	6,765

123. The table shows a considerable increase of impoundings in Belgaum. The small number in the previous year was, however, due to the fact that the forests of Gokák and Parasgad were opened to free-grazing on account of the fodder scarcity of 1891-92, and the number of cattle impounded during that year fell, in consequence, in much the same ratio, in regard to the number impounded during 1890-91, as that in which it rose in 1892-93, as compared with the figures for 1891-92. The number of cattle impounded during 1892-93 was, in fact, less than that reported for 1890-91.

(*c*). Improvement of Forest-Growth.

(*1*). *Natural Reproduction.*

I.—By Seed and II.—By Coppice.

124. *Northern Division of Kánara.*—The Divisional Officer reports that natural reproduction in teak- and blackwood-forests has continued good, but that teak is more backward in reproduction by seed than other species. This is to be expected, and the comparatively-slow natural reproduction of teak from seed will have to be made up for artificially. Mr. Talbot remarked that teak-seedlings were plentiful in the forest in the neighbourhood of the Kátnál, Birchi and Kálánadi streams.

125. The reproduction from stools in the firewood-*coupes* was good.

126. *Central Division of Kánara.*—The Divisional Officer's report affords but little information. He refers to some areas in the Yellápúr-Range in which the reproduction of teak and blackwood was particularly good. In the timber-forests of Yellápur, which have been protected from fire, natural reproduction by seed of teak and other superior species is very satisfactory.

127. *Southern Division of Kánara.*—In the specially-protected forests some signs of natural reproduction by seed were noticed, and teak-seedlings are said to be plentiful in the Bilki-forests, but, generally speaking, reproduction is bad in this Division. This is, in a great measure, owing to the numerous *supári*-gardens and *ráb*-lands by which the forests are intersected throughout the greater part of the Division, and which render regeneration and protection from fire very difficult.

128. *Belgaum.*—The reproduction by seed of teak is reported to be satisfactory in the Nágargárli and Kirpoli forests, areas to which teak-seedling-forest is practically confined.

129. In fuel-cuttings, the trees coppice excellently, but have been greatly damaged by fires.

130. In the area (300 acres) fenced in at Hemadge (moist zone) good progress in natural reproduction by seed is noticeable.

131. In the 1,412 acres of scrub jungle at Konnúr in Gokák (dry zone), which were closed two years ago, the improvement from closure is reported to be most marked. Mr. Murray further reports that, whereas in such forests artificial reproduction is expensive and generally unsuccessful, closure is cheaper and successful.

132. *Dhárwár.*—The Divisional Officer reports that, in the cuttings, the reproduction from stools is satisfactory, but that reproduction from seed is very backward.

133. *Bijápur.*—Mr. Bell, who only took charge of the Division last June, reports that the stools, in the Shivpur cutting of last year, are reproducing satisfactorily. Owing to the extreme dryness of the climate, the great demands on the forest, and the difficulty of protection, natural reproduction by seed is very bad.

134. *Kolába.*—Mr. Stewart reports unfavourably of the reproduction by seed of teak and other species, but natural reproduction is, he considers, fairly good in portions of Alibág, Roha and Nágotna.

135. The jungles of Kolaba consist almost entirely of coppice including a relatively large quantity of teak, and they coppice well.

136. *Ratnágiri.*—Reproduction by coppice is reported to have been satisfactory; while, that by seed was not. The forests are situated for the greater part on the steepest slopes of the Ghâts on which reproduction is naturally slow. The Divisional Officer reports that, although no seedlings could be discovered in the low-lying pure teak-forest of Dápoli, in that of Málván some seedlings, and in the jungles of Kalamboshi a fine growth of *Terminalia tomentosa*, was observed.

(2). *Artificial Reproduction.*

137. *Northern Division of Kánara.*—An experiment was made in the planting-out of teak in bamboo-tubes, as it was found that the seedlings taken up and planted out without special protection failed in most cases. 13,132 seedlings were put out in that way. Of these, 7,723 seedlings are reported to be thriving. This experiment was not, however, properly carried out; the plants were first raised in nurseries or taken from the jungles and afterwards placed in bamboo-tubes, instead of being sown in the tubes in order to prevent all handling of the roots.

138. 600 seedlings of *Terminalia tomentosa*, put down in open places in the Kárwár-range, have succeeded.

139. The expenditure incurred in the Division amounted to Rs. 369.

140. *Central Division of Kánara.*—8,683 teak-, 1,991 blackwood- and 1,597 junglewood-plants were put down from nurseries. Of these, 6,237 teak-, 1,242 junglewood- and 1,741 blackwood-plants existed at the close of the year. The operations were particularly successful in the Yellápúr-range, where 4,289 teak-plants, out of a total of 4,418, survived.

141. The following seedlings are also reported to have been obtained from seeds sown in the forests and to be doing well:—

Teak	2,377
Blackwood	336
Junglewood	5,210
	7,923

142. The amount expended was Rs. 678.

143. *Southern Division of Kánara.*—The disease which attacked the trees in the Kásarkód casuarina-plantation has again appeared, and many of the trees have died during the year.

144. In Honávar, 25 acres were planted up with teak-seedlings and 1,515 are reported to be flourishing.

145. Seeds of several kinds were collected and sown broadcast by the guards, as usual, but no good was effected.

146. Nothing was expended in this Division.

147. *Belgaum.*—A teak-nursery was made at Nágargáli, and the young plants were put out in an enclosed portion of the forest with a view to testing the behaviour of young plants under different degrees of shade. Several small nurseries were also made in the Khánápur-range, and the plantation at Deshnur was extended from 156 to 180 acres at a cost of Rs. 96; 918 plants of several kinds were put down. These plants together with those previously planted, are reported to be coming on very well.

148. The amount expended in the Division was Rs. 96.

149. *Dhárwár, Bijápur and Kolába.*—No fresh planting was done in these Divisions. The plants that came up from seeds sown broadcast in Bijápur, and referred to in the last Administration-Report, were killed by drought.

150. The expenditure incurred on plantations was Rs. 161 in Dhárwár, Rs. 17 in Bijápur; in Kolába there was no expenditure.

151. *Ratnágiri.*—17,991 seedlings of casuarina, *Terminalia tomentosa*, teak, &c, were planted in the Dápoli-plantation, and a nursery containing 15,615 seedlings was made. About 8 khandis of seed were also collected and sown broadcast by the guards.

152. The amount expended was Rs. 84.

153. *General Remarks.*—The poor results obtained up to the present time from artificial regeneration in the moist zone are, I feel sure, mainly due to the inexperience of the men employed in lifting and planting seedlings. Otherwise, we should not find naturally-sown seedlings flourishing in places in which planted seedlings have proved a complete failure. By sowing seed in bamboo tubes,

and planting out the tubes, it is hoped that greater success will be attained, as no damage can be done in this manner to the delicate fibrils of the roots, on the preservation of which the success of the operation mainly depends.

154. Mr. Haselden was the first to start planting by means of bamboo-tubes, and this may account for the superior results said to have been attained in his Division with teak-plants put down in the Yellápur-range in 1892, 4,289 out of a total of 4,418 having survived up to present time.

155. As regards reproduction, generally, experience seems to show that complete closure and the exclusion of fire are the most effective means of regenerating the forests of the Southern Circle. Artificial regeneration cannot be expected to effect much on extensive areas, although it may be usefully employed as a means of establishing a suitable proportion of superior species and of filling up blanks in the covert. The want of a sufficiently-numerous and skilled departmental staff is a great hindrance to successful regeneration.

(3). *Early Thinnings.*

156. In the Northern Division of Kánara, thinnings were made in the teak-plantations of the Kárwár-range, and 4,973 poles were extracted at a cost of Rs. 327. They fetched Rs. 1,371.

(4). *Experiments.*

157. In the Southern Division of Kánara, the Divisional Officer reports that seeds of the ***Pithecolobium saman*** were sown in bamboo-tubes at every náka of the Honávar-range, and that all the seeds have germinated. The trees of this species reared in Kánara, especially in Sirsi and Yellápur, are in a flourishing condition.

(e). EXTRACTION AND TRANSPORT OF MAJOR FOREST-PRODUCE BY LAND AND WATER.

158. The principal produce which is transported by water is that taken down to the Kodibág-depôt near Kárwár from the forests in the immediate neighbourhood of the Kálánadi and its tributary the Káneri. About 81,750 cubic-feet of large teak-timber are extracted in this manner every year. The timber is dragged down to the slopes overhanging the rivers by elephants, slipped into the water, and rafted down to Kodibág.

159. Rivers are also utilized for the transport of small timber and firewood in Kolába, Ratnágiri and Kánara.

160. Produce from other forests is conveyed to depôt in carts, drawn by buffaloes or bullocks.

161. The Southern Mahrattá Railway is also utilized to a considerable extent for the local distribution and export of produce.

(f). EXPLOITATION OF MINOR FOREST-PRODUCE.

(1). *Extraction of Fodder.*

162. The extraction of fodder is quite an insignificant feature in the working of the forests of the Southern Circle. Villagers are generally allowed to remove grass from the open portions of forests in their own villages free of charge. Small patches of valuable grass-lands in Belgaum, Bijápur, Kolába and Ratnágiri are sold by auction, the purchasers making their own arrangements for the cutting and removal of the grass. In the same way, grass is sometimes sold from plantations and closed numbers in Dhárwár. The total amount received annually on account of fodder sold in the above-mentioned manner is only about Rs. 8,174

(2). *Grazing.*

163. Grazing is allowed to cattle in the Government forests under the regulations referred to in paragraph 114 of this report.

164. After protection from fire, the regulation of the grazing generally, but more especially in the timber-forests of Kánara, is the most important factor in the maintenance of the forests. Those forests can be treated only by the method of jardinage, which makes satisfactory regulation of the grazing difficult. At present, cattle are allowed to graze almost everywhere in Kánara, but a salient feature of the organization now in progress will be their confinement to sufficient, but limited, areas, and the exclusion from the most important teak-forests of outsiders' cattle, which come from the more open country in the rainy season.

165. In Dhárwár and Bijapur, the gradual closure of about 25 per cent. of the area of the forests was in progress when it was stopped on receipt of

Government Resolutions Nos. 8227 of 1st December, 1891, and 108 of 7th January, 1892. Since then, no progress has been made in this most important direction, but the areas previously closed have remained closed. No improvement can take place in the condition of the vegetation that sparsely covers the rocky hills of Bijápur, and parts of Belgaum and Dhárwár, without a system of periodical closure, to man and beast, strictly enforced.

166. During the financial year, 1892-93, the revenue aggregated Rs. 107,944 against Rs. 91,487 in 1891-92. The slight increase is ascribable to the introduction of the new fee-system ordered in Government Resolution No. 3595 of 23rd May, 1890.

(3). *Miscellaneous Produce.*

167. The principal article of minor produce in Kánara and Belgaum is *harda* (fruit of the *Terminalia chebula*). During the year under report, the *harda* collection was very poor owing to heavy rain in October and November, which spoilt the quality of the crop. The rates obtained were also lower than those in 1891-92. The collection of the two years was :—

	1891-92. Khandis.	1892-93. Khandis.
Northern Division of Kánara	1,536	701
Central Division of Kánara	425	149
Southern Division of Kánara	1,564	1,505
Belgaum Division	5,148	2,891
	8,673	5,246
Rs. ...	1,35,729	97,058

168. The other important articles exploited in the Circle are *shigekái* (pods of *Acacia concinna*), wax, gum, wild pepper and spices, catechu and tárwád-bark (*Cassia auriculata*).

169. The receipts from minor products amounted to Rs. 1,30,292 during the period under report, against Rs. 1,65,012 in 1891-92.

170. The average amount realized during the last 3 years by the sale of each one of the more important minor products is given below and will give a good idea of the importance of each :—

	Rs.
Harda	1,22,721
Spices and pepper	2,935
Catechu	4,562
Honey and wax	4,095
Tárwád-bark	2,088
Shigekái	5,103

171. In December last, Government issued orders laying down certain principles on which minor products should be exploited, and the Collector and Divisional Officer now decide, each year, which species of minor produce shall be sold during the ensuing year, and which kind shall be left for the free consumption of the public.

172. *Hardas* are sold departmentally, but the right to collect other reserved minor produce is generally sold by auction. It is not the best mode of disposing of some kinds of produce (*e.g.*, pepper), but in the present weak state of establishments, it is necessary to avoid departmental operations as much as possible.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST-PRODUCE.

173. The yield for the period under report was as follows :—

Northern, Central and Southern Divisions of Kánara.

174. The large teak exploited, yielded 305,500 cubic-feet against 354,459 cubic-feet in 1891-92; and small teak, such as poles, rafters, &c., aggregated 50,940 cubic-feet against 81,360 cubic-feet.

175. The quantity of large junglewood removed, rose, from 265,756 cubic-feet in 1891-92, to 296,440 cubic-feet in 1892-93, and that of small junglewood, from 5,968 cubic-feet, to 29,844 cubic-feet. The quantity of large blackwood, exploited, also rose, from 24,546 cubic-feet, to 55,551 cubic feet, and that of small blackwood from 137 to 220 cubic-feet.

176. The decrease in the yield of large teak occurs in all three Divisions: in Northern Kánara it amounted to 16,353 cubic-feet: in Central Kánara to 27,517: and in Southern Kánara to 5,089. The decrease of small teak was 13,578 in Northern and 16,487 in Central Kánara. Cuttings were curtailed because there was a large stock of teak-timber on hand owing to a falling-off in the demand for timber in previous years.

177. This falling-off is no doubt partly due to bad agricultural seasons, and general stagnation of trade, but it is also partly due to the competition of Burma-wood, brought by the Southern Mahratta Railway, which is extensively used by private persons and contractors for public works. Burma-teak is much inferior to Kánara-teak for durability, but it is sawn and free from defects that catch the eye, and compares favourably in appearance with the roughly-adzed, more or less defective, timber of our depôts.

178. The increased yield of blackwood is owing to the demand which has somewhat suddenly sprung up for that wood for export to ports on the coast and to Europe, where the timber is used for veneering purposes, and we may, therefore, expect to see the demand for it increase year by year. There is a large supply available in Kánara, but the local demand is small, and the opening-up of outside markets for the surplus is, therefore, a matter of considerable importance. The increased quantity exploited in the Northern Division to meet this demand amounted to 32,215 cubic-feet.

179. The quantity of large and small jungle-wood, exploited during the year under report, was larger by 30,684 cubic-feet.

180. The number of bamboos extracted, rose, from 3,294,192 in 1891-92 to 4,507,910 in 1892-93.

181. The firewood exploited, fell, from 2,025,643, to 1,138,355 cubic-feet. The decrease (931,586) in firewood is met with in the Central Division of Kánara where the contractor, who purchased fuel for export from the Ankola-forests failed to carry out his contract. There was an increase of 19,079 cubic-feet in Northern and 25,219 in Southern Kánara. The quantity supplied from the former Division to the Southern Mahratta Railway-Company, however, fell from 289,000 to 202,232 cubic-feet. The decrease is owing to difficulties of labour and transport in Kánara which makes the exploitation of firewood in larger quantities unprofitable at present prices.

182. There was a slight increase in the outturn of charcoal and sandalwood.

183. The yield of myrabollams decreased, from 3,346 khandis, to 2,31[illegible] khándis, for the reason explained above.

Belgaum.

184. The yield of large teak from improvement-cuttings amounted to 18,661 cubic feet against 4,424 cubic-feet in 1891-92; of junglewood to 4,202, and of blackwood to 688 cubic-feet, against 184 cubic-feet and 4,801 cubic-feet, respectively.

185. The outturn of teak, black- and jungle-wood-poles measured 36,783 cubic-feet, 12,791 cubic-feet and 484 cubic-feet, respectively, against 34,979, 190 and 12,313 cubic-feet. 3,181 cubic-feet of *bábul* were brought in, against 575 cubic-feet in the previous year.

186. The quantity of firewood exploited, shows an increase. The running-fuel for the Southern Mahratta Railway-Company amounted to 3,128,149 cubic-feet against 2,893,400 cubic-feet; lighting-fuel to 33,262 cubic-feet against 9,522 cubic-feet; and the firewood removed for other purposes to 735,823 cubic-feet against 724,422 cubic-feet.

187. The yield of myrobollams fell, from 5,148 khandis in 1891-92, to 2,751 in 1892-93.

188. The number of bamboos rose, from 402,037, to 678,467. The outturn of *shigekái* (pods of *Acacia concinna*) also rose, from 120, to 140 khandis.

Dhárwár.

189. The yield of teak decreased, from 59,635 cubic-feet in 1891-92, to 21,079 cubic-feet in 1892-93; and of jungle- and black-wood-rafters, pieces, &c., and *jarayet*-pieces (agricultural wood) from 10,282, to 5,036 cubic-feet.

190. On the other hand, the quantity of fuel extracted, increased, from 213,722 cubic-feet, to 227,401 cubic-feet, and the number of bamboos, from 335,247, to 465,134. 4 khandis of myrobollams and 3,359 sandalwood-trees were also obtained during the year under report.

191. The decrease in the quantity of timber exploited is due to the large balance in the depôts at the beginning of the year, the proximate causes being the agricultural distress during the previous year and the general depression of trade.

Bijápur.

192. The yield of timber increased, from 2,659 cubic-feet in 1891-92, to 3,069 cubic-feet in 1892-93; that of cart-loads of firewood decreased, from 65,991, to 46,810, and of animal-loads, from 65,656, to 62,440 cubic-feet. But the head-loads of firewood increased, from 104,765, to 106,983 cubic-feet.

Kolába.

193. The yield of teak remained much the same as that of the previous year. The quantity of firewood removed increased, from 113,411 cubic-feet, to 480,814.

Ratnágiri.

194. The timber-yield of teak and junglewood amounted to 69,350 cubic-feet against 128,575 cubic-feet in 1891-92, and of firewood to 154,844 cubic-feet against 26,925. 14 maunds of myrobollams were also exploited during the year under report.

195. Most of the timber cut in Ratnágiri is procured from Khoti-land, and the yield is, consequently, uncertain.

METHODS OF EXPLOITATION.

196. The selection-method is generally adopted in the exploitation of large and small timber. The trees to be cut are marked, before exploitation, by a Forest-officer, and the wood is then removed by a contractor, or departmentally, to a depôt, where it is sold. In Kolába, a good deal of wood is sold standing.

197. Fuel-forests are cut clean, and the produce is sold after stacking at so and so much per 100 cubic-feet.

198. Improvement-fellings are confined to plantations and to the larger and best-stocked forests of Belgaum and Kánara, where large areas are annually taken in hand.

199. The areas over which improvement fellings were carried out aggregated about 250,000 acres. Almost the whole of this area comes under the category of saleable fellings.

200. Bamboos are exploited on the permit-system.

CHAPTER IV.

FINANCIAL RESULTS.

201. The details of the year's transactions are shown in Forms No. 61—65 appended.

202. The receipts and expenditure of the Southern Circle for the period under report, 1st April, 1892, to 30th June 1893, were :—

Receipts.	Charges.			Surplus.
	A.—Conservancy and Works.	B.—Establishments.	Total.	
Rs.	Rs.	Rs.	Rs.	Rs.
1,384,371	460,866	358,276	819,142	565,229

203. The figures for the financial years 1891-92 and 1892-93 were :—

Year.	Receipts.	Charges.			Surplus or net revenue.
		A.—Conservancy and Works.	B.—Establishments.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1891-92 ...	1,147,707	437,415	267,816	705,231	442,476
1892-93 ...	1,201,085	388,824	285,773	674,597	526,488
Increase ...	53,378	.....	17,957	.....	84,012
Decrease ...	.....	48,591	.....	30,634	.....

204. Both the gross and the net revenues of the year under report were larger than those of the year before. The increase is met with chiefly in the Northern Division of Kánara and Kolába, and is due to more favourable sales of timber exploited by Government Agency.

205. The following shows the revenue *and* outstandings at the end of the period under report, as well as at the end of the financial years :—

Year.	Amount realized.	Balance due to the Department at the end of the year.	Total.
	Rs.	Rs.	Rs.
Period under report (1st April 1892 to 30th June 1893)	13,84,374	1,78,541	15,62,912
Financial year 1891-92	11,47,707	1,70,206	13,17,913
Do. 1892-93	12,01,085	2,43,963	14,45,048
Difference ...	.....	.....	1,27,135

206. The difference in the totals given in the last column, of course, shows the real difference in the receipts of the two financial years.

207. The following statement shows the receipts and expenditure under main heads :—

Heads of Revenue and Charges.	1st April, 1892, to 30th June, 1893, or the period under report.	Financial Years.			
		1891-92.	1892-93.	Increase.	Decrease.
REVENUE.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government agency	9,47,767	7,42,283	8,37,582	95,299	...
II.—Timber and other produce removed from the forests by consumers or purchasers	4,14,101	3,87,984	3,46,130	...	41,854
III.—Drift and waif-wood and confiscated forest produce	6,968	8,169	6,717	...	1,452
IV.—Revenue from forests not managed by Government	839	279	824	545	...
V.—Miscellaneous	14,696	8,992	9,832	840	...
Grand Total, Revenue ...	13,84,371	11,47,707	12,01,085	53,684	43,306
CHARGES.					
A.—Conservancy and Works.					
I.—Timber and other produce removed from the forests by Government agency	3,08,321	3,14,107	2,65,614	...	48,493
II.—Timber and other produce removed from the forests by consumers or purchasers ...	10,290	7,971	8,574	603	...
III.—Drift and waif-wood and confiscated forest produce ...	63	99	47	...	52
IV.—Revenue from forests not managed by Government	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders, in forests managed by Government ...	10,275	5,752	9,497	3,745	...
VI.—Live-stock, stores, tools and plant.	13,142	15,510	9,853	...	5,657
VII.—Communications and buildings ...	8,554	6,809	7,951	1,142	...
VIII.—Demarcation, improvement and extension of forests ...	1,00,305	81,583	77,705	...	3,878
IX.—Miscellaneous	9,915	5,584	9,583	3,999	...
Total A. ...	4,60,866	4,37,415	3,88,824	9,489	58,080
B.—Establishments.					
I.—Salaries	3,00,195	2,23,047	2,39,765	16,718	...
II.—Travelling allowances	44,057	34,021	34,816	795	...
III.—Contingencies	14,024	10,748	11,192	444	...
Total B. ...	3,58,276	2,67,816	2,85,773	17,957	...
Total Charges, A. and B. ...	8,19,142	7,05,231	6,74,597	27,446	58,080

208. The receipts show increases under the main heads I, IV and V, and decreases under II and III.

I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.

209. The increase under this head is met with as follows :—Rs. 1,44,593 under "*a.* Timber," and Rs. 8,285 under "*d.* Sandalwood." While decreases amounting to Rs. 20,611 and Rs. 50,416 occur under "*b.* Firewood" and "*e.* Grass and other minor produce," respectively.

210. The increase in the revenue from *timber* is met with mostly in the Northern Division of Kánara (Rs. 59,369), and in Kolába (Rs. 92,464). In Northern Kánara, there was an increased sale of wood in the auctions at the Haliyál-Depôt, where 196,630 cubic-feet were sold during the year against 93,000 cubic-feet in the year before. The rates obtained, however, showed no material change. In Kolába, a considerably-larger quantity of timber was exploited by departmental agency than that sold in the previous year, and higher prices were obtained. The revenues in Belgaum and Dhárwár also show increases of Rs. 1,278 and Rs. 4,987, respectively.

211. The decrease in revenue under "*b.* Firewood" occurs in the Northern Division of Kánara (Rs. 8,975), Belgaum (Rs. 9,201) and Dhárwár (Rs. 4,290) ; it is ascribed (*a*) to a smaller quantity of fuel having been supplied to the Railway-Company from Northern Kánara and Belgaum * and (*b*) to fewer stacks having been sold in Dhárwár, because of the large quantity thrown on the market from Inámdárs' forests. The receipts from *firewood* in the Central Division of Kánara show an increase of Rs. 1,704.

212. The increase under "*d. Sandalwood*" occurs in Dhárwár (Rs. 6,845) and in Southern Kánara (Rs. 1,644). In Dhárwár, a large number of trees was taken out from occupied lands and sold by Government, and in Southern Kánara higher prices were obtained for wood from Government-forests.

213. The myrobollam-crop of the year was very poor and consequently the receipts under "*e. Grass and other minor produce*" show a decrease of Rs. 35,478 in Belgaum, and Rs. 18,491 in Northern, and Rs. 13,148 in Central Kánara. The crop in Southern Kánara was equally bad, but the actuals of that Division were enhanced owing to a part of the revenue, properly belonging to 1891-92, having been credited in the accounts of the year under report.

II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OF PURCHASERS.

214. The actuals of the year under "*a. Timber*" show a decrease of Rs. 59,600.

In Kolába, where the decrease amounts to Rs. 66,354, most of the cuttings were carried on by departmental agency, and, consequently, due allowance being made for cost of departmental operations, the revenue decreased under this head and increased correspondingly under *I—a.* In the Southern Division of Kánara, there was a falling-off in the demand for wood for local consumption, and this caused a decrease of Rs. 3,652 in the revenue.

215. On the other hand, there was an increased demand for export-timber in the Kárwár-range of the Northern Division of Kánara, whose revenue shows an increase of Rs. 3,157. The receipts for timber in fuel-cuttings in Belgaum also increased. The increase in Belgáum, Dhárwár and Bijápur, aggregates Rs. 2,022. In Central Kánara, outstanding-balances of the previous year's revenue were credited in the accounts for the year under report; hence an increase of Rs. 3,157, there.

216. Under "*b. Firewood,*" there is an increase of Rs. 9,894 in Northern Kánara, and of Rs. 1,840 in Southern Kánara. This is attributable to increased demand, for export by sea, of firewood in the coast-districts. The figures for Belgaum and Kolába show a decrease of Rs. 1,387 and Rs. 4,683, respectively.

217. Under "*c. Bamboos*" and "*e. Other minor produce,*" decreases amounting to Rs. 2,165 and Rs. 1,429, respectively, are to be noted. There was a falling-off in the demand for export-bamboos in Haliyál† ; and certain kinds of minor produce were allowed free to the public under the new rules (see paragraph 171) ; hence the decrease shown above. An increase of Rs. 1,124 in the receipts from bamboos is to be noted in Belgaum.

218. An increase of Rs. 16,456 is met with in the revenue under "*d. Grazing*" for the reason explained in paragraph 166.

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* The increase in the fuel-supply, shown in paragraph 186 of this report, is due to the extra period from April- June, 1893 ; while, the figures of receipts, given in paragraph 209, are for the quantity furnished within the financial year, 1892-93.

† The increase in the number of bamboos, referred to in paragraph 180, was due to exploitations in April-June, 1893.

219. The increase under "III" occurs mostly in the Central Division of Kánara, and is owing to the receipts of 1891-92, having been swelled by the sale of an unusually-large quantity of confiscated wood (*vide* paragraph 171 of that year's report).

EXPENDITURE.

A.—Conservancy and Works.

220. The decrease under "I," *viz.* Rs. 48,493, is ascribed to the following reasons:—

"*a. Timber.*"

221. In the Northern Division of Kánara (Rs. 33,544), no new contracts to bring in wood to the depôt were given during the year, as there was on hand a large residue of timber brought in during the previous year; in Central Kánara (Rs. 16,467) payment to a contractor was withheld, as his timber did not reach the sale-depôt in time.

222. In Kolába, there is an increase of Rs. 19,961, which is due to a corresponding increase in the receipts under "*I. a. Timber.*"

b. Firewood.

c. Grass and other minor produce.

223. The decreases under these heads amount to Rs. 9,353, and Rs. 15,424, respectively and are due to decreases in the corresponding heads of receipts.

224. The increase under "V" is due to larger payments to Khots and *Rakhwáldárs* in Kolába; that under "VII" is due to construction of a depôt-house at Hubli, and under "IX" to charges connected with grain-compensation to certain forest subordinates.

B.—Establishment.

225. The increase of Rs. 16,718 under "I.—Salaries" is attributable to the reorganization-scheme of the superior staff, introduced in this Presidency from 1st April, 1892, under which 4 officers were promoted in the grades of Deputy Conservator and 2 in those of Assistant-Conservator. The pay of Extra-Assistant-Conservators was also increased, and two additional appointments of that class were allotted to this Circle.

226. The following shows the value calculated at seigniorage-rates of the forest produce granted free during the two years 1891-92 and 1892-93:—

Division.	1891-92 (FINANCIAL YEAR.)					1892-93 (FOREST YEAR).				
	Timber.	Bamboos of sorts.	Canes.	Firewood.	Value.	Timber.	Bamboos.	Canes.	Firewood.	Value.
	Cubic feet.	No.	Headloads.	Cubic feet.	Rs.	Cubic feet.	No.		Cubic feet.	Rs.
Northern Division, Kánara	11,689	5,350	..	1,813	2,821	23,927	15,765	..	2,334	5,738
Central Division, Kánara	29,562	6,150	8	..	5,562	29,705	7,120	..	..	6,490
Southern Division, Kánara	16,238	3,000	11	..	3,771	22,057	..	..	..	4,916
Belgaum	763	..	..	..	184	3,252	4,366	..	792	899
Dhárwár	239	..	..	..	130	202	600	..	..	92
Bijápur	..	..	..	..	..	..	..	..	..	..
Kolába	16,660	..	..	..	1,324	17,190	..	..	..	1,119
Ratnágiri	...	..	..	..	..	100	..	.	..	32
Total ..	75,156	14,500	19	1,813	13,792	96,433	27,851	..	3,126	19,286

227. The value of the produce taken free without special permission, including grass, firewood, timber, honey, &c., is not included in the above figures.

CHAPTER V.

FOREST ADMINISTRATION.

228. During the year, the relations of Forest- to Revenue-Officers and Government underwent a radical change. The effect of the new rules under Government Resolutions No. 650 of 26th January, 1891, and No. 7107 of 6th September, 1892, is the transfer of the management of unorganized forests to the Collector. The Conservator is placed under the Commissioner, and his direct connection with Government is severed, except in regard to questions of account, establishment and the annual report.

229. The rule, under which all letters from the Conservator to a Divisional Officer or from a Divisional Officer to the Conservator, pass through the Collector, has proved a great hindrance to the despatch of business, and there is, I think, a consensus of opinion in the Revenue- and Forest-Departments that the old system was superior.

230. An official hand-book concisely formulating the orders of Government on the organization and conduct of forest matters, and precisely defining the duties of Conservators and Divisional Officers, would be very useful. The Forest Code of the Government of India, as applied to this Presidency, is full of exceptions. The organization of the Indian forest-service*, the modes of appointment to the Provincial Service, the relations of Conservators to the Local Government, and the management of the forests, are all points on which the Forest-Code is at variance with the organization or practice existing under the Government of Bombay.

231. The complaint of insufficiency and inefficiency of protective and executive establishments is general.

232. The lack of trained men of better general education than that of the average Range-Officer and Forester of the present day cannot be remedied all at once, but the desired objects will, it is hoped, be in time attained by the appointment of trained men from the Poona College of Science, and by a large increase in the staff.

233. Four men are appointed yearly to join the Forest-Class at the Poona College. There are now four men studying there; four are about to be appointed; and five have just passed out.

234. The Divisional Officer, Ratnágiri, reports that great inconvenience is caused by village-records' not being kept in villages in that Division. The principal business of departmental officers, there, is to protect reserved trees on occupants' lands, and the absence of records in a village, in which an alleged offence has been committed, often makes it troublesome to determine whether the property belongs to Government, or not.

235. The Southern Circle now extends from the borders of Mysore in the south to a point north of Bombay, a distance of 370 miles as the crow flies. A glance at the map shows how inconvenient its form is for inspection by the Conservator. As far north as Bijápúr it is compact, but a narrow strip, 150 miles long, adjoining the Central Circle and running up from Rátnágiri to the extreme north of Kolába, is cut off from the rest of the Circle. It would save a great deal of the Conservator's time now spent in getting to and from outlying districts, if the transfer of Kolába and Ratnágiri to the Northern or Central Circle were carried out. The area of the Northern Circle is only 2,247 square miles, while that of the Southern Circle is 5,381. If the proposed redistribution be effected, only 326 square miles will be taken from the Southern Circle, but Kolába and Ratnágiri will form a part of a Circle to which they geographically and ethnologically belong, while the Southern Circle will consist of a compact area, in which the official language, as well as that of the people, is Kánarese, a matter of no small importance in the posting and promotion of members of the executive establishment, who cannot, as a rule, speak both languages.

TOUR OF INSPECTION.

236. On April 23, 1892, Mr. Wroughton received charge from me of the Conservator's Office at Belgaum, and left for Astoli in the Belgaum-District on the 2nd May. There, he inspected fuel-cuttings. Camp was moved to Supa on the 6th. On the 11th he marched to Barchi. Here he met Mr. Hodgson, Divisional Officer, Working Plans, and the outline of a Working-Plan for the Haregali series, was decided on. Haliyál was reached on the 12th and Nágargáli on the 17th. There he inspected the forests and fuel-cuttings with the Divisional Officer. From Nágargáli he went to Dhárwár and returned to head-quarters on the 27th for the rains.

237. On the 28th October, the Conservator left for Bijápur, where the Divisional Office was examined on the 30th, and reached Karjat on the 7th November.

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*The department under the control of the Government of India has for its head an Inspector-General; here, a Conservator. Consequently, much that is found in the Code is based on the assumption that a departmental officer higher in rank than a Conservator exists, and is quite inapplicable to the conditions obtaining in Bombay.

238. From Karjat he proceeded on the 11th *viâ* Kámpóli to Shiróli, Pen (where he met the Divisional Officer) and Nágotna. On the 26th, he moved to Indápúr, and to Dásgáon on the 28th.

239. On the evening of the 1st December, he left for Mahád and proceeded thence to Poládpúr, Káshédi and Khed in Ratnágiri, where he met the Divisional Officer on the 4th. Camp was moved to Chiplún on the 7th, Aravli on the 12th, and to Sangameshvar on the 14th, and thence to Ratnágiri, *viâ* Wanri, on the 17th. From Ratnágiri Mr. Wroughton returned to Belgaum on January 3. On the 9th he left for Hubli, where he met the Divisional Officer.

240. On the 16th January he moved on to Tadas, and on the 17th to Mundgod in Kánara. Thence to Pálá, Ekambi and Sirsi.

241. On the 30th he left Sirsi, for Siddápur and Kodkani, returning to Sirsi on the 8th. The Divisional Officer met him there. From Sirsi he moved camp to Sonda on the 13th, and proceeded, *viâ* Bartanhalli and Manchikeri, to Yellápur.

242. On the 6th March, he moved on the Tátwhál, where he met the Working-Plans' Officers. Next day, he continued the march to Supa, *viâ* Kulgi and Poteli, where he was joined by the Divisional Officer. On the 24th he left for Jagalbet, Chándwádi, Tinái and Castle-rock, and on the 5th April returned to Belgaum.

243. On the 28th Mr. Wroughton handed over charge of his office to me, and left on furlough.

244. During May, I made a short trip to Nágargáli, returning to head-quarters on June 5.

ESTABLISHMENT.

245. The sanctioned reorganization of the superior staff was brought into force on 1st April, 1892, but the proposed reorganization of the subordinate staff was not carried out. The actual cost amounted to Rs. 1,22,519 and Rs. 1,75,759 on account of the superior and subordinate staff, respectively, against Rs. 1,05,402 and Rs. 1,51,000 of 1891-92.

246. Under the reorganization-scheme, two additional Extra-Assistant-Conservators were appointed to the Southern Circle. One of these was attached to the Conservator's Office, and the other to the Kolába-Division as Sub-Divisional Officer.

247. The Kolába and Ratnágiri-Districts were again separated, and each was put under a Divisional Officer. Mr. B. G. Deshpánde, Extra-Assistant-Conservator, was appointed to Ratnágiri, while Mr. T. R. D. Bell retained charge of Kolába.

248. The changes among the officers were :—

249. Mr. C. Greatheed, Divisional Officer, Kolába, handed over charge of his office to Mr. N. K. Thánedár on 1st April, 1892, and proceeded on furlough. On the 9th, Mr. Thánedár handed over charge to Mr. Bell, who handed over again to Mr. Thánedár on 29th May, 1892, and went on 3 months' privilege-leave. Mr. R. Ryan assumed charge on 2nd June from Mr. Thánedár, who, on the former's going on privilege leave, resumed it on the 15th and held it until Mr. Stewart's return from furlough on July 7. Mr. Ryan, on his transfer to Kolába, handed over charge of Bijápur to Mr. Hight, Divisional Forest Officer, Dhárwár, on the 30th May, 1892.

250. Mr. J. L. L. MacGregor, Conservator of Forests, proceeded on a year's furlough, giving over charge to Mr. R. C. Wroughton on the 22nd April, 1892.

251. Mr. B. J. Haselden, Divisional Officer, Central Division of Kánara, was on furlough from 8th September, 1892, to 12th June, 1893, during which period Mr. T. R. Bell held charge of the Division.

252. Mr. Hight, who was on privilege-leave until 27th April, resumed charge of the Dhárwár-Division from Mr. Ryan, and gave it over to Mr. W. R. Woodrow on 14th September, 1892, before proceeding on a year's furlough.

253. Mr. Ryan, on his return from privilege-leave, took charge of the Bijápur-Division on the 28th July from Mr. Hight, and continued in charge until 2nd March, 1893, when he was suspended, and ultimately dismissed. In his place Mr. Bell was appointed.

254. Mr. Dattatraya Manjunáth Bijoor, who was appointed sub. *pro-tem.* Extra-Assistant-Conservator, reported himself for duty on 1st June, 1892, and was appointed Personal Assistant to the Conservator of Forests, S. C.

255. Mr. G. K. Betham returned from leave on 27th October, 1892, and took charge of the Southern Division of Kánara from Mr. Woodrow.

256. Mr. A. C. Robinson, Extra-Assistant-Conservator, transferred from the Northern to the Southern Circle, reported himself for duty as Sub-Divisional Officer, Kolába, on the 20th January, 1893.

257. In the Working-Plans' Branch, the following officers held charge of Divisions :—

Party I.

Mr. T. R. Bell, 1st—5th April, 1892,
„ Haripad Mitra, 6th—11th April, 1892,
„ C. Hodgson, 12th April—11th November, 1892,
„ H. Murray, 12th November—12th December, 1892,
when Mr. H. Mainwaring, who had been newly posted to this Circle, took charge.

258. Mr. Hodgson held charge of the IInd Party during the whole of the year.

259. The conduct of the executive establishment is reported to have been, on the whole, satisfactory.

260. Two cases of misconduct, involving the dismissal of foresters, occurred.

261. The conduct of the subordinate establishment was not so good, and 41 guards had to be dismissed.

262. The services of the following officers are mentioned by the Divisional Officers as specially deserving of notice:—

Mr. Sheshu Manju, Extra-Assistant-Conservator,
„ A. C. Robinson do. do.
„ Jamaitkhán Samsherkhán, Range Forest Officer, Nágotna.
„ Ganpat Jaywant Rege, Forest Ranger, Khánápur.
„ Hassan valad Mohidin, Range Forest Officer, Chikodi.
„ Wáman Bálkrishna do. do. Parasgad.
„ Ganpat Rámji Máne, Forest Ranger, Sirsi.
„ Subráo Shivrám, Forester, Sirsi.
„ Shankar Bápu Sáwant, Range Forest Officer, Devgad.
„ Hari Vishnu Kháre, do. do. Sangameshvar.

263. I resumed charge of the Southern Circle this year on return from furlough, on 28th April, 1893. Mr. Wroughton, my *locum tenens*, told me, before leaving, that he considered that all the officers serving under him (with the exception of Mr. Ryan, whose services have since been dispensed with by Government) had worked well.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 6th October 1893.

LIST OF STATEMENTS ACCOMPANYING THE FOREST ADMINISTRATION REPORT OF THE CONSERVATOR OF FORESTS, SOUTHERN CIRCLE, FOR 1892-93.

Form No. 46 ...	Area of Reserved Forests, 1892-93.
„ „ 46A ...	Area of Protected Forests, 1892-93.
„ „ 47 ...	Progress made in, and expenditure incurred on, Forest Settlements.
„ „ 48 ...	Demarcation and maintenance of boundaries.
„ „ 49 ...	Forest area surveyed and under survey.
„ „ 50 ...	Progress made in Working Plans.
„ „ 51 ...	Communications and Buildings.
„ „ 52 ...	Prosecutions for breaches of Forest Rules during 1892-93.
„ „ 52A ...	Statement showing the number of cases of misappropriation of minor produce of the several Divisions of the Southern Circle for the year 1892-93.
„ „ 52B ...	Statement showing the number of cases dealt with under Section 67 of the Forest Act.
„ „ 52C ...	Statement showing the number of cases in which fines amounting to one rupee, two rupees and so on, up to the maximum, were inflicted during 1892-93.
„ „ 53 ...	Area of Forest tracts protected from fire during 1892-93.
„ „ 54 ...	Area open and closed to grazing during 1892-93.
„ „ 55 ...	Return of grazing in the State Forests during 1892-93.
„ „ 56 ...	Area of Plantations, 1892-93.
„ „ 57 ...	Outturn of Timber and Fuel, 1892-93.
„ „ 58 ...	Outturn of Minor Forest Produce, 1892-93.
„ „ 59 ...	Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1892-93.
„ „ 60 ...	Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1892-93.
„ „ 60A ...	Abstract showing the value of Live and Dead Stock for the year 1892-93.
„ „ 61 ...	Summary of Revenue and Expenditure of the different Divisions during the year 1892-93.
„ „ 62 ...	Account current for the year 1892-93.
„ „ 63 ...	Revenue received and outstandings on account of Revenue during 1892-93.
„ „ 64 ...	Outstandings and Liabilities on account of Contractors and Disbursers for 1892-93.
„ „ 65 ...	Financial results of the year 1892-93.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 25th September 1893.

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FORM No. 46.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Area of Reserved Forests, 1892-93.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Northern Division of Kánara.	Haliyál and Kárwár.	Kánara ...	Haliyál and Kárwár ...	298,425	466	...	...	298,425	466		
Central Division of Kánara.	Mundgod, Ankola and Kumta.	Do. ...	Mundgod, Ankola and Kumta.	117,945	184	*504	†128	118,321	185	* No. 8542 of 31st October 1892.	
Southern Division of Kánara.	Sirsi and Honávar	Do. ...	Sirsi and Honávar ...	66,269	104	...	...	66,269	104	† No 9747 of 13th December 1892.	
Belgaum ...	Khánápur, Gokák, Belgaum, Sampgaon, Chikodi and Athni.	Belgaum ...	Khánápur, Gokák, Belgaum, Sampgaon, Chikodi and Athni.	316,522	495	...	...	316,522	495		
Dhárwár ...	Dhárwár, Kalghatgi, Hángal, Bankápur, Kod, Gadag, Ron, Nargund, Hubli and Ránebennur	Dhárwár ...	Dhárwár, Kalghatgi, Hángal, Bankápur, Kod, Gadag, Ron, Nargund, Hubli and Ránebennur.	109,850	172	...	...	109,850	172		
Bijápur ...	Bádámi and Bágalkot.	Bijápur ...	Bádámi, Hungund, Bijápur, Bágevádi, Muddebihál and Indi.	99,275	155	...	...	99,275	155		
Kolába ...	Alíbág, Panvel, Pen, Roha, Mahád, Mángaon, Karjat, Khálápur and Nágothna.	Kolába ...	Alíbág, Panvel, Pen, Roha, Nágothna, Mahád, Mángaon, Karjat and Khálápur.	244,126	381	...	...	244,126	381		
Ratnágiri ...	Dápoli, Khed, Sangameshwar, Devgad and Málvan.	Ratnágiri ...	Dápoli, Khed, Rájápur, Chiplún, Sangameshwar, Ratnágiri, Devgad and Málvan.	12,880	20	...	...	12,880	20		
			Total ...	1,265,292	1,977	504	128	1,265,668	1,978		

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 46 A.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Area of Protected Forests, 1892-93.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		Number and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in Square Miles.	Acres.	Acres.	Acres.	Equivalent in Square Miles.		
Northern Division of Kánara.	Supa ...	Kánara ...	Supa	462,476	723	...	...	462,476	723	* No. 8542A of 31st October 1892.	
Central Division of Kánara.	Mundgod, Kumta, Yellápur and Ankola.	Do. ...	Mundgod, Kumta, Yellápur and Ankola.	567,472	887	*973	†407	568,038	888	† Nos. 4022, 8542 and 3299, dated respectively, 9th May 1892, 31st October 1892 and 8th May 1893.	
Southern Division of Kánara.	Siddápur, Honávar, Sirsi and Bhatkal.	Do. ...	Siddápur, Honávar, Sirsi and Bhatkal.	757,929	1,184	...	‡14	757,915	1,184	‡ No. 3398, dated 13th April 1892.	
Belgaum ...	Belgaum, Chikodi, Gokák and Parasgad.	Belgaum ...	Belgaum, Chikodi, Gokák and Parasgad.	126,012	197	...	...	126,012	197		
Dhárwár ...	Dhárwár, Kalghatgi, Bankápur, Kod, Hángal, Gadag, Ránebennur-Karajgi.	Dhárwár ...	Dhárwár, Kalghatgi, Bankápur, Kod, Hangál, Gadag, Ránebennur and Karajgi.	166,658	260	...	...	166,658	260	.....	
Bijápur ...	Bágalkot and Bádámi.	Bijápur ...	Bágalkot, Hungund, Bijápur, Bágevádi and Indi.	57,369	90	...	...	57,369	90	.....	
Kolába ...	Alíbág, Panvel, Pen, Roha, Mahád, Mángaon, Karjat, Khálápur and Nágothna.	Kolába ...	Alíbág, Panvel, Pen, Roha, Mahád, Mángaon, Karjat, Khálápur and Nágothna.	40,902	64	6	...	40,908	64	No. 4539 of 30th May 1892.	
			Total ...	2,178,818	3,405	979	421	2,179,376	3,406	.....	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 47.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Statement showing the Progress made in, and the Expenditure incurred on, Forest Settlements during 1892-93.

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	Areas finally settled during the year.						Areas undergoing Settlement.						Remarks.
			Number and date of Government order according final sanction to the settlement.	Name of Forest settled.	Area, in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing Settlement.		
						In Forest accounts.	In other accounts.		Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In Forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		Sq. Ms.		*Reserved.*		Rs.	Rs.	Rs.					Rs.	Rs.	
Northern Division, Kánara ...	Kánara ...	252	...	...	...	...	...	...	Kárwár	191	Kárwár	24	182	919	
Central do. ...		185	...	...	...	...	...	...	.....	...	.....	...	...	...	
Southern do. ...		104	...	...	...	...	...	...	.....	...	.....	...	...	...	
Belgaum Division	Belgaum ..	495	...	...	...	...	...	...	.. ...	...	.....	...	...	...	
Dhárwár do	Dhárwár ...	172	...	...	...	...	..	...	.....	...	.....	...	...	...	
Bijápur do.	Bijápur ...	...	...	...	...	...	...	...	Bádámi, Hungund, Bágalkot, &c., forests.	155	.....	...	...	...	
Kolába do.	Kolába ...	370	...	...	..	...	...	...	Madrai villages in Nágothna.	11	.....	...	...	...	
Ratnágiri do.	Ratnágiri ...	20	...	...	...	...	...	...	.....	...	.....	...	...	...	
	Total ...	1,598	...	...	...	...	...	...	.....	357	.....	24	182	919	
				Protected.											
Northern Division, Kánara ...	Kánara ...	...	...	...	...	...	...	...	.....	...	.....	...	...	...	
Central do. ...	Do. ...	237	...	...	...	...	...	...	Yellápur	352	.....	...	...	...	
									Ankola	62	.....	...	...	...	
									Kumta	140	.....	...	...	...	
Southern do. ...	Do. ...	80	...	...	...	...	...	...	.....	...	Sirsi, 168 villages .	431	3,319	11,406	
Belgaum Division	Belgaum ...	...	...	...	...	...	...	...	.....	*197	.....	...	...	...	* Government orders on the settlement of this area were received after the year had closed.
Dhárwár do.	Dhárwár ...	...	...	...	...	...	...	...	.....	260	Dhárwár, Gadag, Karajgi and Bankápur.	111	3,633	16,125	
Bijápur do.	Bijápur ...	...	...	...	...	...	...	...	.....	90	.....	...	...	...	
Kolába do.	Kolába ...	64	...	...	...	...	...	...	.....	...	.....	...	...	...	
Ratnágiri do.	Ratnágiri ...	...	...	...	...	...	...	...	... ..	...	.....	...	...	...	
	Total ...	381	...	...	...	...	..	...	... ..	1,101	.. ...	542	6,952	27,531	
	Grand Total ...	1,979	...	...	...	...	...	...	.....	1,458	.....	566	7,134	28,450	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

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FORM No. 48.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Record of Demarcation and Maintenance of Boundaries, 1892-93.

Division.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries not demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.	
Northern Division, Kánara ...	...	...	...	...	...	...	...	...	...	
Central do. do. ...	22	55	25	102	9	...	111	986	375	
Southern do. do. ...	...	...	...	...	...	...	...	...	...	The Divisional Officer reports that no data are available.
Belgaum Division	...	...	...	...	...	...	...	...	...	
Dhárwár do.	...	...	3,355	3,355	...	30	3,385	...	...	
Bijápur do.	...	...	190	190	...	...	190	...	...	
Kolabá do.	...	...	...	...	...	...	...	...	...	The Divisional Officer reports that no data can be furnished.
Ratnágiri do.	...	...	...	...	...	...	...	...	...	
Total ...	22	55	3,570	3,647	9	30	3,686	986	375	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 49.

FOREST DEPARTMENT, 17 PARTY (BOMBAY FORESTS).

Statement of Forest Areas surveyed and under Survey during the year 1892-93.

In the Southern Circle.

Division.	Areas surveyed and under survey during the year.																						Areas remaining to be taken under Survey.	Total forest area at end of the year as per Form No. 46.	COST.			Remarks.
	Special surveys—Maps on 4" scale or over, by Survey of India Department or Forest Survey Branch.								*Ordinary, included in District Surveys.*								*Chain and compass or other surveys by local officers.*											
	WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.			WITH INTERIOR DETAILS.					BOUNDARY SURVEYS.							
	With Details of growing Stock.		Without Details of growing Stock.		Total Cost.				With Details of growing Stock.		Without Details of growing Stock.		Total Cost.				4-Inch or over.		Under 4-Inch.		Total Cost.							
	Previous.	Of the year.	Previous.	Of the year.		Previous.	Of the year.	Total cost.	Previous.	Of the year.	Previous.	Of the year.		Previous.	Of the year.	Total Cost.	Previous.	Of the year.	Previous.	Of the year.		Previous.	Of the year.	Total Cost.			Previous.	Of the year.	Entire cost of all Surveys to end of the year.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
				Sq. Ms.	Rs. a. p.																									
Kolaba 8"—																														
Detail	...	...	...	16	3,355 2 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	
North Kanara 4"—																														
Triangulation ..	...	...	...	600	7,057 2 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	From 1st October 1892 to 30th September 1893.
Traversing ...	...	...	...	300	6,589 9 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Detail	...	...	...	220	1,773 13 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total ...	...	...	...	...	34,732 12 3	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	

H. HUTCHINSON, Colonel, S. C.,
Superintendent, Bombay Forest Surveys.

Poona, 10th October 1893.

The Superintendent, Bombay Forest Surveys, states that the areas previously surveyed have not been recorded by Circles or Districts, that no record of the same has been kept, except on the maps themselves, and that, therefore, the figures to be entered in the several columns above cannot be given. The areas already surveyed and those remaining to be surveyed are, however, given in paragraph 47 of the report.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle

FORM No. 50.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Progress made in Working-Plans, 1892-93.

Division.	AREAS FOR WHICH WORKING-PLANS HAVE BEEN COMPLETED.		AREAS FOR WHICH WORKING-PLANS ARE BEING COMPILED.		Areas for which Working-Plans have still to be taken in hand.	Total Forest area, as in Form No. 46.	Entire cost per square mile, of Working-Plans completed.	REMARKS.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.				
1	2	3	4	5	6	7	8	9
	Sq. miles.			Sq. miles.	Sq. miles.	Sq. miles.	Rs.	
Northern Division, Kánara	122	.....	.....	83	984	1,189	513	*i. e.* at 12 annas and 10 pies per acre.
Central do. do.	.....	.....	.....	.....	.....	.....	.....	
Southern do. do.	.....	.....	.....	.....	.....	.....	.....	
Belgaum do.	.....	.....	.....	.....	.....	.....	.....	
Dhárwár do.	.....	.....	.....	.....	.....	.....	.....	
Bijápur do.	.....	.....	.....	.....	.....	.....	.....	
Kolába do.	.....	.....	.....	.....	.....	.....	.....	
Ratnágiri do.	.....	.....	.....	.....	.....	.....	.....	
Total ...	122	.....	.....	83	984	1,189	513	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 51.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Communications and Buildings for 1892-93.

Division.	New Works undertaken during the year.						Repairs executed during the year.						Remarks.
	Buildings.		Roads and Paths.			Total Expenditure on new work.	Buildings.		Roads and Paths			Total Expenditure on repairs.	
	Description of Building.	Expenditure incurred.	Road or Path, and object of the same.	Length of road or path.	Expenditure incurred.		Nature of Repairs.	Expenditure incurred.	Nature of Repairs.	Length repaired.	Expenditure incurred.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs.			Rs.	Rs.		Rs.			Rs.	Rs.	
Northern Division, Kánara.	Well at Sambráni	300	Path from the main road to the Haliyál new depôt ground.	500 feet ...	261		Monsoon repairs to the Haliyál Range Office.	34	Contribution for repairs to the Local Fund road from Bhagwati to Pateli done by the Revenue Department		200		
	Do. at the Haliyál Depôt ...	300	Jungle cart-track from Badgund to Avedi for the conveyance of wood from forests to depôts.	4 miles ...	75		Do. do. to the Divisional Office Building at Haliyál.	17	Repairs to forest cart-tracks and pools in the Division.	23 miles ...	49		
							Do. do. to the Kodibág Depôt house.	65					
							Do. do. to 9 forest nákás and other temporary sheds, for hardas, &c.	191					
	Total ...	600			336	936		307			249	556	
Central Division, Kánara.	Watch house at Dhehálli ...	300	Extending the road from Kanigeri to Udamaki.	1·06 miles.	200		Monsoon repairs to buildings in the Yellápur Range.	1,146	Muruming roads in the Yellápur Range.	8·51 miles .	308		
	Do. do. at Sántgal ..	300					Do, do. in the Mundgod Range.	243	Do. do. in the Mundgod Range.	2·50 miles .	54		
	Well at Kolikeri	348					Do. do. Ankola do. ...	174					
	Do. at Wadgatti	202					Do. do. Kumta do. ...	85					
	Total ...	1,150			200	1,350		1,648			362	2,010	
Southern Division, Kánara.	Well at Bilki	250	.....	...	...	...	Monsoon repairs to several nákás, &c., in the Division.	317	Muruming, &c., road from Baswankop to Chitgeri.	5 miles ...	90		
	Do. at Hebankeri	90					Re-roofing depôt house at Sirsi	100					
	Total ...	340				340		417			90	507	
Belgaum ...	Inspecting shed at Londa ...	18	.....	...	...	...	Monsoon repairs, &c., to 14 náka-houses.	122	Repairing the cart-track leading to the Nandi-cutting.	300 feet ...	15		
	Do. at Kirpoli ...	48					Do. do. to the Nandgad temporary náka-house.	4					
							Repairs to the rest-house at Nágargali...	357	Metalling, ditching and rolling the Halsi-Nágargali road.	2·56 miles .	1,056		
	Total ...	66			...	66		483			1,071	1,554	
Dhárwár ...	Depôt house at Hubli	999	.....	...	...		Re-roofing Artal náka and ordinary repairs such as turning tiles, white-washing, &c., to forest buildings.	142					
	Total ...	999			...	999		142			...	142	
Bijápur	.....	...	.....	...	..	...	Petty repairs such as white-washing, repairing gate-door, &c.	15					
	Total ...	...			...	...		15			...	15	
Kolába	.....	...	.....	...	...	...	Repairs to the upper portions of roofs of 2 huts in the Alibág Range.	5	.....	...	...		
							Thatching the huts...	10					
							Do. 4 Choki-huts in the Karjat Range.	32					
							Do. 6 do. in the Khálápur Range.	49					
	Total ...	...			...	...		96			...	96	
Ratnágiri ...	.....	...	.....	...	...	...	Current monsoon repairs to the guard's hut in the Kawp Plantation.	5	Monsoon repairs to the forest road between Camp Dápoli and Band Reserves.	6 miles ...	45		
	Total ..	...			...	...		5			45	50	
	Grand Total ...	3,155			536	3,691		3,113			1,817	4,930	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

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ANNUAL FORM No. 52.

Forest Department, Bombay, Southern Circle.

Register of Breaches of Forest Rules during 1892-93.

Forest Division and Civil District.		Cases pending from 1891-92.	New Cases of the Year.					Total cases.	Disposed of during the Year.						Cases pending at close of year.
			Injury to Forest by fire.	Unauthorized felling or appropriation of wood and minor Forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Northern Kánara.	Division, A	...	5	109	...	5	119	119	68	74	48	50	116	124	3
	B	...	1	14	...	...	15	15	13	16	2	6	15	22	...
	C	...	6	...	...	...	6	6	...	...	...	...	...	...	...
	Total	...	12	123	...	5	140	140	81	90	50	56	131	146	3
Central Kánara.	Division, A	...	3	15	...	...	18	18	10	15	8	9	18	24	...
	B	...	1	21	...	...	22	22	20	23	2	2	22	25	...
	C	...	...	6	...	...	6	6	...	...	...	...	...	...	...
	Total	...	4	42	...	...	46	46	30	38	10	11	40	49	...
Southern Kánara.	Division, A	...	...	100	...	...	100	*100	83	83	7	7	90	90	...
	B	...	...	4	...	...	4	4	4	4	...	...	4	4	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	104	...	...	104	104	87	87	7	7	94	94	...
Belgaum	A	...	1	5	38	90	8	141	142	126	161	14	41	140	202	2
	B	...	...	5	439	7	24	475	475	475	475	...	...	475	475	...
	C	...	...	89	34	...	...	123	123	...	...	...	...	...	...	...
	Total	...	1	99	511	97	32	739	740	601	636	14	41	615	677	2

* Of these, 10 cases were withdrawn, the accused having died.
A means cases taken into Court.
B means cases disposed of under Section 67 of Indian Forest Act, 1878.
C means undetected cases.

ANNUAL FORM No. 52—*continued.*

Forest Division and Civil District.		Cases pending from 1891-92.	New Cases of the Year.					Total cases.	Disposed of during the Year.						Cases pending at close of year.
			Injury to Forest by fire.	Unauthorized felling or appropriation of wood and minor Forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Dhárwár ...	A ...	...	2	24	3	...	29	29	18	32	9	43	27	75	2
	B ...	...	...	35	...	2	37	37	37	107	...	...	37	107	...
	C ...	...	...	19	...	...	19	19	...	...	...	...	...	...	...
	Total ...	...	2	78	3	2	85	85	55	139	9	43	64	182	2
Bijápur ...	A ...	1	...	11	1	2	14	15	14	35	1	15	15	50	...
	B ...	...	...	81	2	...	83	83	83	285	...	...	83	285	...
	C ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	1	...	92	3	2	97	98	97	320	1	15	98	335	...
Kolába ...	A ...	5	...	121	...	12	133	138	102	495	32	81	134	576	4
	B ...	...	2	143	...	9	154	154	154	681	...	...	154	681	...
	C ...	...	...	320	...	...	320	320	...	...	...	...	...	...	...
	Total ...	5	2	584	...	21	607	612	256	1,176	32	81	288	1,257	4
Ratnágiri ...	A ...	1	...	32	...	3	35	36	17	22	18	24	35	46	1
	B ...	...	3	117	1	5	126	126	123	1,342	3	125	126	1,467	...
	C ...	...	1	9	...	...	10	10	...	...	...	...	...	...	...
	Total ...	1	4	158	1	8	171	172	140	1,364	21	149	161	1,513	1
Grand Total ...	A ...	*8	15	450	94	30	589	597	438	917	137	270	575	1,187	12
	B ...	...	12	854	10	40	916	916	909	2,933	7	133	916	3,066	...
	C ...	...	96	388	...	...	484	484	...	...	...	...	...	...	...

A means cases taken into Court.

B means cases disposed of under Section 67 of Indian Forest Act, 1878.

*Error in the Divisional Return for 1891-92 now rectified.

C means undetected cases.

Belgaum, 25th September 1893.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 52 A.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Statement showing the Number of Cases of Misappropriation of Minor Produce of the several Districts of the Southern Circle for the years 1891-92 and 1892-93.

Division.	NUMBER OF CASES OF MISAPPROPRIATION OF																								Total Cases of Misappropriation.		Remarks.
	Timber.		Firewood.		Minor Produce.																						
	Leaves.		Stones, earth and minerals.		Cinnamon, matti, kaki and bábul barks.		Tarwad bark.		Canes and Karvi.		Harda.		Honey.		Bábul pods.		Cinnamon.		Thorns.		Total.					
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	
Northern Division, Kánara ..	23	19	..	100	..	4	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3	4	26	123	
Central Division, Kánara	29	17	..	3	47	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47	16	76	36	
Southern Division, Kánara ..	34	7	5	..	*12	97	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	*12	97	*51	104	
Belgaum	33	111	148	332	3	2	5	15	..	1	..	1	..	1	8	4	..	..	..	..	..	..	..	10	16	34	197	477	
Dhárwár	47	34	19	21	1	..	3	2	..	..	..	2	..	..	..	..	..	..	1	..	..	..	..	..	5	4	71	59	
Bijápur	..	2	48	79	2	1	2	7	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5	11	53	92	
Kolába	272	153	..	107	..	..	2	3	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	3	4	275	264	
Ratnágiri	118	86	..	6	91	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	91	57	209	149	
Total ..	556	429	220	648	156	177	12	27	1	1	..	3	3	1	9	5	..	..	1	..	..	..	..	13	*182	227	*958	1,304	

* Error in the Divisional Return for 1891-92, now rectified.

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 52 B.

Statement showing the Number of Cases dealt with under Section 67 of the Forest Act and the Amounts paid as compensation in 1892-93 as compared with the preceding year.

Divisions.	1891-92.						1892-93.					
	Cases compounded.					Amount realized.	Cases compounded.					Amount realized.
	For misappropriation of			For	Total.		For misappropriation of			For	Total.	
	(a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	(d) Other offences.			(a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	(d) Other offences.		
Northern Division of Kánara.	8	...	...	...	8	49	11	2	...	...	13	89
Central Division of Kánara...	43	...	16	1	60	197	20	...	...	...	20	103
Southern Division of Kánara.	31	5	9	...	45	91	4	...	...	...	4	53
Belgaum	45	131	6	28	210	351	95	317	27	36	475	580
Dhárwár	30	19	...	16	65	180	16	12	2	7	37	83
Bijápur	1	37	2	9	49	215	2	70	9	2	83	188
Kolába	78	71	2	16	167	546	88	57	...	9	154	871
Ratnágiri	89	14	86	10	199	587	57	6	55	5	123	612
Total ...	325	277	121	80	803	2,216	293	464	93	59	909	2,579

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

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FORM No. 52 C.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Statement showing the Number of Cases in which Fines amounting to one rupee, two rupees and so on, up to the maximum, were respectively inflicted during 1892-93.

Division.	NUMBER OF FINES INFLICTED.																																		TOTAL.	
	Rupee 1 and under.	Rupees 2 and under.	Rupees 3 and under.	Rupees 4 and under.	Rupees 5 and under.	Rupees 6 and under.	Rupees 7 and under.	Rupees 8 and under.	Rupees 9 and under.	Rupees 10 and under.	Rupees 11 and under.	Rupees 12 and under.	Rupees 13 and under.	Rupees 14 and under.	Rupees 15 and under.	Rupees 17 and under.	Rupees 18 and under.	Rupees 19 and under.	Rupees 20 and under.	Rupees 22 and under.	Rupees 25 and under.	Rupees 28 and under.	Rupees 29 and under.	Rupees 30 and under.	Rupees 31 and under.	Rupees 35 and under.	Rupees 38 and under.	Rupees 40 and under.	Rupees 50 and under.	Rupees 52 and under.	Rupees 54 and under.	Rupees 60 and under.	Rupees 66 and under.	Rupees 108 and under.	Rupees 150 and under.	Number.	Amount.
Northern Division, Kánara .	3	3	1	...	...	...	2	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	13	89
Central Division, Kánara ...	6	4	1	1	...	1	...	1	...	...	...	1	...	1	...	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	103
Southern Division, Kánara .	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	53
Belgaum	417	27	4	2	12	2	...	1	...	4	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...	1	...	475	580
Dhárwár	20	10	3	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	37	83
Bijápur	45	16	6	4	3	3	...	2	...	...	...	2	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83	188
Kolába	56	31	12	12	4	8	7	1	...	2	2	3	2	2	1	...	1	1	...	...	...	2	1	...	1	...	...	2	...	1	1	...	...	...	1	154	871
Ratnágiri	59	18	12	8	7	1	1	2	1	2	1	1	1	...	1	...	2	...	...	2	...	...	...	...	...	...	...	...	1	1	1	...	1	...	...	123	612
Total ...	606	109	39	30	26	15	11	9	1	8	3	7	4	5	3	1	4	1	3	4	1	2	1	1	1	1	1	2	2	2	2	1	1	1	1	909	2,579

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 53.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Area of Forest Tracts protected from Fire during 1892-93.

Division.	Forest Tracts.	Year in which protection commenced.	Area protected during 1891-92.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	REMARKS.
			Acres.	Acres.	Acres.	Acres.	Rs.	
Northern Division, Kánara.	Haliyál	1887-88 ...	157,275	190,975	244	190,731	6,259	
	Kárwár	,,	14,135	83,366	153	83,213	1,385	
	Supa	1888-89 ...	196,344	52,017	141	51,876	4,900	
	Total ...	...	367,754	326,358	538	325,820	12,544	
Central Division, Kánara.	Yellápur	1888-89 ...	61,297	61,822	1,856	59,966	3,386	
	Mundgod	,,	33,971	36,890	340	36,550	3,094	
	Ankola	,,	4,853	19,236	171	19,065	571	
	Total ...	...	100,121	117,948	2,367	115,581	7,051	
Southern Division, Kánara.	Sirsi	1887-88 ...	23,623	46,915	1,143	45,772	827	
Belgaum. ...	Chikodi	1883-84 ...	800	954	.....	954	18	
	Khánápur...	1884-85 ..	71,176	88,605	1,926	86,679	1,377	
	Belgaum	1886-87 ...	22,857	58,780	194	58,586	287	
	Gokák-Sampgaon ...	1887-88 ...	14,465	15,552	90	15,462	141	
	Total ...	...	109,298	163,891	2,210	161,681	1,823	
Dhárwár... ...	Dhárwár	1888-89 ...	2,599	4,698	2,460	2,238	178	
	Kalghatgi	,,	5,790	7,112	50	7,062	138	
	Bankápur	,,	5,187	5,276	630	4,646	102	
	Hángal	,,	4,446	4,582	.....	4,582	131	
	Kod	,,	9,797	8,040	25	8,015	70	
	Gadag	,,	6,480	6,410	177	6,233	32	
	Total ...	...	34,299	36,118	3,342	32,776	651	
Bijapur	Bádámi	1889-90 ...	.....	15,607	.....	15,607	233	
	Bágalkot	,,	.....	13,393	51	13,342	267	
	Total ...	...	.....	29,000	51	28,949	500	
Kolába	Alíbág	1892-93 ...	.....	19,983	613	19,370	27	
	Nágothna	,,	.....	10,622	337	10,285	...	
	Mángaon	,,	.....	2,270	335	1,935	17	
	Mahád	,,	.....	3,540	13	3,527	...	
	Panvel	,,	.....	8,941	476	8,465	1	
	Karjat	,,	.....	4,254	161	4,093	4	
	Khálápur	1887-88 ...	18,633	9,549	708	8,841	131	
	Total ...	...	18,633	59,159	2,643	56,516	180	
Ratnágiri ...	Dápoli	1889-90 .	.....	2,516	6	2,510	9	
	Khed	1892-93 ...	.....	5,222	.....	5,222	...	
	Chiplún	,,	.....	799	.....	799	...	
	Sangameshvar	,,	.....	3,108	.....	3,108	...	
	Ratnágiri	,,	.....	270	.....	270	...	
	Rájápur	,,	.....	320	.....	320	...	
	Devgad	,,	.....	11	.....	11	...	
	Málvan	1889-90 ...	.....	625	.....	625	...	
	Vengurla	1892-93 ...	.....	10	.....	10	...	
	Total ...	...	.....	12,881	6	12,875	9	
	Grand Total ...	...	653,728	792,270	12,300	779,970	23,585	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 54.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Area closed and open to grazing during 1892-93.

Division.	AREA IN SQUARE MILES.					Total area.	REMARKS.
	Closed to all animals.		Closed to browsers (camels, goats or sheep).		Open to all animals.		
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
1	2	3	4	5	6	7	8
Northern Division, Kánara ..	190	...	18	...	980	1,188	
Central Division, Kánara	185	...	...	...	888	1,073	
Southern Division, Kánara... ...	104	...	...	...	1,184	1,288	
Belgaum	30	...	544	...	118	692	
Dhárwár	100	...	...	...	332	432	
Bijápur	45	....	200	...	...	245	
Kolába	30	...	...	...	415	445	
Ratnágiri	16	...	...	...	4	20	
Total ...	700	...	762	...	3,821	5,383	

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 25th September 1893.

FORM No. 55.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Return of Grazing in the State Forests during 1892-9.

Division.	GRAZING ON PAYMENT—NUMBER OF ANIMALS.													GRAZING FREE NUMBER OF ANIMALS.												
	At full rates.						At privileged rates.							By right under Settlement.						During pleasure of Government, or otherwise than under Settlement.							
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of Fees at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of Fees at full rates.	Total value of Fees at full rates.	Grand total of value at full rates.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
						Rs.						Rs.	Rs.						Rs.						Rs.	Rs.	Rs.
Northern Division, Kánara ...	169	1,112	...	...	...	1,281	28,013	102,010	2,150	...	4	16,388	1,30,161	...	...	...	...	...	...	...	...	...	...	...	...	...	1,31,442
Central Division, Kánara ...	313	422	...	...	...	735	25,185	112,926	1,677	...	...	17,369	1,38,321	...	...	...	...	...	...	...	...	...	...	...	...	...	1,39,056
Southern Division, Kánara ...	113	...	...	...	...	113	35,673	161,476	4,676	...	...	25,190	1,97,733	...	...	...	...	...	...	...	...	...	...	...	...	...	1,97,846
Belgaum	2,354	8,477	35,405	...	111	11,825	7,693	48,835	43,355	...	88	19,968	39,935	...	...	...	...	...	...	15,871	44,505	164	...	...	38,165	38,165	89,925
Dhárwár	3,376	7,661	28,184	...	...	10,936	11,363	48,279	50,764	...	...	22,104	44,208	...	...	...	...	...	...	...	...	...	...	...	...	*...	55,144
Bijápur	1,005	3,448	3,669	...	195	3,266	6,335	23,337	12,307	...	44	9,783	19,566	793	15,397	...	...	...	8,491	...	...	...	...	...	...	8,491	31,323
Kolába	419	475	...	...	16	493	...	...	...	...	...	...	...	390	1,688	...	...	...	1,542	16	38	...	...	...	44	1,586	2,079
Ratnágiri	...	...	...	...	...	...	58	15	...	...	...	33	66	...	...	...	...	...	...	...	...	...	...	...	...	...	66
Total ...	7,749	21,595	67,258	...	322	28,649	114,320	496,878	114,929	...	136	110,835	569,990	1,183	17,085	...	...	...	10,033	15,887	44,543	164	...	...	38,209	48,242	646,881

* The Divisional Officer reports that the figures in Columns Nos. 21 to 27 are not available, the Revenue Authorities not having carried out the provisions of Rule VIII of the Grazing Rules sanctioned in Government Resolution No. 3595, dated 23rd May 1890.

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 56.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Area of Plantations, 1892-93.

Division.	Name of Plantation.	Area in Acres.				Receipts.	Charges.	Remarks.
		On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	Of the year.		
	Regular Plantations.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	
Northern Kánara. Division,	Kadra	357	...	...	357	2,389	369	
	Mardi	110	...	...	110			
	Sulgeri	110	...	...	110			
	Kárwár	123	...	...	123	147	...	
	Bingi...	20	...	...	20			
	Arge	36	...	...	36			
	Birchi	221	...	...	221	...	...	
	Singatgeri	83	...	...	83.	...	...	
	Bomanhalli	200	...	...	200.	...	...	
Central Kánara. Division,	Devarbail	21	...	...	21	...	126	
	Arbail	5	...	...	5.	...	...	
Southern Kánara. Division,	Kasarcode	298	...	...	298	28	...	
Belgaum	Kalasgadde	13	...	...	13	...	...	
	Linganmath...	16	...	...	16	...	...	
	Deshnur	156	24	...	180	...	96	
Dhárwár	Kalgeri	21	...	...	21	...	...	
	Kambarganvi	25	...	...	25	...	88	
	Devikop	29	...	...	29	...	17	
	Kalkundi	275	...	...	275	...	45	
	Hirur...	12	...	...	12	...	11	
Bijápur	Mamdápur	174	...	...	174	...	...	
	Anantpur	90	...	...	90	...	12	
	Shivpur	12	...	...	12	...	...	
Kolába	Ramdharni	50	...	...	50	...	...	
	Rájwádi	12	...	...	12	...	...	
	Chochi	6	...	...	6	...	...	
	Nerle...	3	...	...	3	...	...	
	Bháliwádi	13	...	...	13	...	...	
	Boregaon	6	...	...	6	...	...	
	Kharvandi Kudore	2	...	...	2	...	...	
	Khadve	2	...	...	2	...	...	
	Beed	1	...	...	1	...	...	
	Palaspuri	1	...	...	1	...	...	
	Sugve	1	...	...	1	...	...	
	Puli	1	...	...	1	...	...	
	Savali	10	...	...	10	...	...	
	Paturne	1	...	...	1	...	...	
	Ambivli	1	...	...	1	...	...	
	Adosi...	97	...	...	97	...	...	
	Lavji...	71	...	...	71	...	...	
	Ubarvira	15	...	...	15	...	...	
	Jambrug	63	...	...	63	...	...	
	Sungde	68	...	...	68	...	...	
	Khopoli	45	...	...	45	...	...	
	Bhanváji	86	...	...	86	...	...	
	Nowse	32	...	...	32	...	...	
	Honad	20	...	...	20	...	...	
	Kumboli	46	...	...	46	...	...	
	Kharsundi	38	...	...	38	...	...	
	Vanaosal	2	...	...	2	...	...	
	Bhilaoli	37	...	...	37	...	...	
	Kalothe Mokasi	53	...	...	53	...	...	
	Mandop	41	...	...	41	...	...	
	Vinegaon	3	...	...	3	...	...	
	Kalothe Rayote	7	...	...	7	...	...	
	Nudao	2	...	...	2	...	...	
	Ningdoli	1	...	...	1	...	...	
	Dhamni	2	...	...	2	...	...	
	Vadgaon	38	...	...	38	...	...	
	Kansoli	8	...	...	8	...	...	
	Nodhel	24	...	...	24	...	...	
	Loniwáli	1	...	...	1	...	...	
	Vaverle	11	...	...	11	...	...	
	Pali Budruk...	9	...	...	9	...	...	
	Vadvihir	6	...	...	6	...	...	
	Manivli Manawli	13	...	...	13	...	...	
	Varse...	323	...	...	323	...	...	
	Boregaon Khurd	119	...	...	119	...	...	
	Sudewádi	190	...	...	190	...	...	
	Khálápur	3	...	...	3	...	...	
	Ghodiaoli	7	...	...	7	...	...	
Ratnágiri	Dápoli	81	17	...	98	20	84	
	Total, Regular Plantations...	4,079	41	...	4,120	2,584	848	

FORM No. 56—*continued.*

Division.	Name of Plantation.	Area in Acres. On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	Receipts. Of the year.	Charges. Of the year.	Remarks.
		Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	
	Cultural Operations.							
Central Division, Kánara.	Sahasráwali	12	...	...	12	...	...	
	Yellápur	26	...	...	26	21	74	
	Harwada	1	...	...	1	...	...	
	Baleguli	8	...	...	8	...	190	
	Hulihond	4	6	...	10	...	139	
	Sakalben	...	4	...	4	...	149	
Southern Division, Kánara.	Banwási	27	...	...	27	...	...	
	Anegundi	7	...	...	7	...	...	
	Kalkatti	2	...	...	2	...	...	
Belgaum	Three kumri villages in Belgaum	21	...	21	...	...	...	The 20 gunthás shown in last year's return against Nagargali have been omitted, being half an acre (Section 268 of the Forest Code).
	Konnur	200	...	...	200	...	...	
	Kanburgi	5	...	...	5	...	...	
	Maskenhatti	2	...	...	2	...	...	
	Hemadge	300	...	300	...	...	...	
Dhárwár	Kambarganvi	375	...	...	375	...	...	
	Hosur	307	...	...	307	...	...	
	Hunshikumri	300	...	...	300	...	...	
	Karkikop	1	...	...	1	...	...	
	Dhundshi	80	...	...	80	...	...	
	Allipur	16	...	...	16	...	...	
	Bábápur	127	...	...	127	...	...	
	Channikatti	10	...	...	10	...	...	
	Bassapur	10	...	...	10	...	...	
	Harikatti	2	...	...	2	...	...	
	Banihatti	42	...	...	42	...	...	
	Holtikota	200	...	...	200	...	...	
	Ragikallapur	25	...	...	25	...	...	
	Kalkeri	200	...	...	200	...	...	
	Galginkatti	470	...	...	470	...	...	
	Tersikop	300	...	...	300	...	...	
	Kalkundi	100	...	...	100	...	...	
	Hindasgeri	400	...	...	400	...	...	
	Halekote Chikeri	706	...	...	706	...	...	
	Dudihalli	51	...	...	51	...	...	
	Nidnigal	44	...	...	44	...	...	
	Bálapur	8	...	...	8	...	...	
	Chikbar	46	...	...	46	...	...	
	Medleri	144	...	...	144	...	...	
	Dámbal	463	...	...	463	...	...	
	Sankadwadak	268	...	...	268	...	...	
	Nabapur	172	...	...	172	...	...	
Bijápur	Mamdápur	216	...	...	216	...	...	
	Kaládgi	195	...	...	195	...	5	
	Jaknur	9	...	...	9	...	...	
	Hosur	2	...	...	2	...	...	The area shown in last year's return against Khánápur and Nagral have been omitted, being ½ acre in each case
	Manglur	2	...	...	2	...	...	
Kolába	Sattád	81	...	...	81	...	...	
	Ektád	5	...	...	5	...	...	
	Several places in Karjat ...	20	...	...	20	...	...	
	Do. in Khálápur..	2	...	...	2	...	...	
Ratnágiri	Dápoli	55	...	55	...	...	...	
	Khed...	17	...	17	...	...	...	
	Chiplún	73	...	73	...	...	...	
	Sangameshvar	128	...	128	...	...	...	
	Málvan	30	...	30	...	...	...	
	Total, Cultural Operations...	6,317*	10	624	5,703	21	557	* The difference of 1 acre between the closing balance of 1891-92 and opening balance of 1892-93, is owing to fractions of the acre having been omitted.
	Grand Total ...	10,396	51	624	9,823	2,605	1,405	

Belgaum, 25th September 1893.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle,

FORM No. 57.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Outturn (in cubic feet solid) of Timber and Fuel during the year 1892-93, and Agency of Exploitation.

Division.	TIMBER IN THE ROUGH; LOGS.					TIMBER IN THE ROUGH; POLES.					SAWN OR SQUARED TIMBER.					MISCELLANEOUS.					FUEL.					TOTAL.
	Government.	Purchasers.	Free-grants.	Right-holders.	Total.	Government.	Purchasers.	Free-grants.	Right-holders.	Total.	Government.	Purchasers.	Free-grants.	Right-holders.	Total.	Government.	Purchasers.	Free-grants.	Right-holders.	Total.	Government.	Purchasers.	Free-grants.	Right-holders.	Total.	Outturn.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	C. ft.	C. ft.	C. ft.	C.ft	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Northern Division of Kánara... ...	49,728	64,170	15,319	...	129,217	32,550	15	...	...	32,565	245,357	12,149	8,608	...	266,114	3,033 Bamboos No. 300	..... Bamboos No. 3,128,135	..... Bamboos No. 15,765	200	3,233 Bamboos No. 3,144,200	348,007	358,220	2,334	...	708,561	1,139,690 Bamboos No. 3,144,200
Central Division of Kánara	58,504	30,571	...	...	89,075	20,348	1,328	1,700	...	23,376	72,268	22,759	28,005	...	123,032	..... Bamboos No. 294 Sandalwood Khandis 21-6-14	..... Bamboos No. 1,170,500 Bamboos on contract No. 100,000	..... Bamboos No. 7,120	...	..... Bamboos No. 1,177,914 Bamboos on contract No. 100,000 Sandalwood Khandis 21-6-14	21,394	783,980	...	...	805,374	1,040,857 Bamboos No. 1,177,914 Bamboos on contract No. 100,000 Sandalwood Khandis 21-6-14
Southern Division of Kánara... ...	154	71,055	22,057	...	93,266	...	...	...	...	...	14,137	...	...	...	14,137	..... Sandalwood Khandis 54-14-7	..... Bamboos No. 177,068	.....	...	..... Bamboos No. 177,068 Sandalwood Khandis 54-14-7	10,570	201,696	...	...	212,266	319,669 Bamboos No. 177,068 Sandalwood Khandis 54-14-7
Belgaum Division...	...	14,806	...	...	14,806	44,016	8,301	3,036	...	55,443	12,060	854	216	...	13,130	9,125 Bamboos No. 50 Sandalwood trees 131 Sandalwood pieces 53	1,347 Bamboos No. 674,101	..... Bamboos No. 4,366	...	10,472 Bamboos No. 678,517 Sandalwood trees 131 Sandalwood pieces 53	2,307,641	386,799	792	...	2,695,232	2,789,083 Bamboos No. 678,517 Sandalwood trees No. 131 Sandalwood pieces 53
Dhárwár do. ...	...	...	...	...	...	23,435	2,645	202	...	26,282	...	...	...	...	...	.....	..... Bamboos No. 464,534	..... Bamboos No. 600	...	..... Bamboos No. 465,134	139,356	88,045	...	...	227,401	253,683 Bamboos No. 465,134
Bijápur do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	3,069	.....	...	3,069	...	215,233	...	...	215,233	218,302
Kolába do. ...	...	...	...	...	...	598,115	88,905	17,190	2,370	706,580	20	...	...	...	20	1,710	.....	.....	...	1,710	...	480,814	...	...	480,814	1,189,124
Ratnágiri do. ...	...	...	...	...	...	5,958	...	...	...	5,958	...	...	...	...	...	.....	63,292	100	...	63,392	2,475	152,369	...	...	154,844	224,194
Total ...	108,386	180,602	37,376	...	326,364	724,422	101,284	22,128	2,370	850,204	343,842	35,762	36,829	...	416,433	13,868 Bamboos No. 644 Sandalwood Khandis 76-0-21 Sandalwood trees 131 Sandalwood pieces 53.	67,708 Bamboos No. 5,614,338 Bamboos on contract No. 100,000	100 Bamboos No. 27,851	200	81,876 Bamboos No. 5,642,833 Bamboos on contract 100,000 Sandalwood Khandis 76-0-21 Sandalwood trees 131 Sandalwood pieces 53.	2,829,443	2,667,156	3,126	...	5,499,725	7,174,602 Bamboos No. 5,642,833 Bamboos on contract No. 100,000 Sandalwood Khandis 76-0-21 Sandalwood trees 131 Sandalwood pieces 53.

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 58.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Outturn of Minor Forest Produce.

	Description of Produce.	PRODUCE REMOVED OR UTILIZED.										REMARKS.
		By Government Agency.		By Purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	
Northern Division of Kanara.	Honey	...	...	...	552 0 0	...	...	...	...	...	552 0 0	
	Stones ... ... Cubic Feet.	...	...	350	1 0 0	...	...	...	...	350	1 0 0	
	Myrabollams ... ... Khandis.	701	12,044 0 0	...	...	...	...	...	...	701	12,044 0 0	
	Shigekai ... ... Do.	...	...	...	905 0 0	...	...	...	...	...	905 0 0	
	Cinnamon bark	...	...	...	72 0 0	...	...	...	...	...	72 0 0	
	Wild turmeric	...	...	..	7 0 0	...	...	...	...	...	7 0 0	
	Tapping fees on Baini trees	...	...	...	33 0 0	...	...	...	...	...	33 0 0	
	Shindoli branches ... Head-loads.	...	...	1,805	56 0 0	...	...	...	...	1,805	56 0 0	
	Do. ... Cart-loads.	...	...	99	50 0 0	...	...	...	...	99	50 0 0	
	Canes ... ... Head-loads.	...	...	9	2 0 0	...	...	...	...	9	2 0 0	
	Pepper	...	...	...	12 0 0	...	...	...	...	...	12 0 0	
	Nux vomica	...	...	...	32 0 0	...	...	...	...	...	32 0 0	
	Goring	...	...	...	10 0 0	...	...	...	...	...	10 0 0	
	Cinnamon leaves	...	...	...	11 0 0	...	...	...	...	...	11 0 0	
	Divi-Divi seeds ... ... Bags.	32	64 0 0	...	...	...	...	...	...	32	64 0 0	
	Shembe bark	...	...	...	25 0 0	...	...	...	...	...	25 0 0	
	Grazing fees	...	...	...	13,252 0 0	...	...	...	...	...	13,252 0 0	
	Total ...	...	12,108 0 0	...	15,020 0 0	...	...	...	...	...	27,128 0 0	
Central Division of Kanara.	Grass ... ... Bundles.	26,370	83 0 0	2,000	1 0 0	...	...	...	...	28,370	84 0 0	
	Myrabollams ... ... Khandis.	149	2,616 0 0	...	...	...	...	...	...	149	2,616 0 0	
	Shigekái ... ... Do.	4	81 0 0	...	...	...	...	...	...	4	81 0 0	
	Shigechalli ... ... Maunds.	...	...	299	37 0 0	...	...	...	...	209	37 0 0	
	Grazing fees	...	...	...	13,047 0 0	...	...	...	...	...	13,047 0 0	
	Earth ... ... Cubic Feet.	...	...	2,088	7 0 0	...	...	...	...	2,088	7 0 0	
	Stones ... ... Do.	...	...	2,592	9 0 0	...	...	...	...	2,592	9 0 0	
	Quarry fees	...	...	...	4 0 0	...	...	...	...	...	4 0 0	
	Honey	...	...	...	1,311 0 0	...	...	...	...	...	1,311 0 0	
	Grass	...	...	...	5 0 0	...	...	...	...	...	5 0 0	
	Rámphal and Rámpatri	...	...	...	1,959 0 0	...	...	...	...	...	1,959 0 0	
	Cinnamon	...	...	...	121 0 0	...	...	...	...	...	121 0 0	
	Thorns ... ... Cart-loads.	...	...	20	1 0 0	...	...	...	...	20	1 0 0	
	Cáju seeds	...	...	...	26 0 0	...	...	...	...	...	26 0 0	
	Baini trees	...	...	8	10 0 0	...	...	...	...	8	10 0 0	
	Tapping fees on Baini trees	...	...	...	22 0 0	...	...	...	...	...	22 0 0	
	Canes ... ... Head-loads.	...	...	193	48 0 0	...	...	...	...	193	48 0 0	
	Skins and horns ... ... No.	...	...	99	108 0 0	...	...	...	...	99	108 0 0	
	Betelnuts and Jack fruits	...	..	...	10 0 0	...	...	...	...	...	10 0 0	
	Total ...	...	2,780 0 0	...	16,726 0 0	...	...	...	...	...	19,506 0 0	
Southern Division of Kanara.	Myrabollams ... ... Khandis	1,505	37,027 0 0	...	...	...	...	...	...	1,505	37,027 0 0	
	Shigekái ... ... Do.	27	513 0 0	...	...	...	...	...	...	27	513 0 0	
	Grazing fees	...	...	...	18,978 0 0	...	...	...	...	...	18,978 0 0	
	Honey	...	...	...	1,060 0 0	...	...	...	...	...	1,060 0 0	
	Grass	...	...	...	25 0 0	...	...	...	...	...	25 0 0	
	Fruits	...	...	...	3 0 0	...	...	...	...	...	3 0 0	
	Rámpatri	...	...	...	624 0 0	...	...	...	...	...	624 0 0	
	Cinnamon	...	...	...	176 0 0	...	...	...	...	...	176 0 0	
	Wild pepper	...	...	...	39 0 0	...	...	...	...	...	39 0 0	
	Nux vomica	...	...	...	61 0 0	...	...	...	...	...	61 0 0	
	Catechu	...	...	...	4,191 0 0	...	...	...	...	...	4,191 0 0	
	Palm trees	...	...	147	187 0 0	...	...	...	...	147	187 0 0	
	Aleksist	...	...	...	31 0 0	...	...	...	...	...	31 0 0	
	Canes ... ... Head-loads.	...	...	400	178 0 0	...	...	...	...	400	178 0 0	
	Thorns ... ... Cart-loads.	...	...	136	10 0 0	...	...	...	...	136	10 0 0	
	Soppu (green leaves for manure) ... ... Head-loads.	...	...	49	1 0 0	...	...	...	...	49	1 0 0	
	Stones ... . Cart-loads.	...	...	1,740	109 0 0	...	...	...	...	1,740	109 0 0	
	Tapping fees	...	...	...	187 0 0	...	...	...	...	...	187 0 0	
	Sluge-bark ... ... Head-loads.	...	...	183	45 0 0	...	...	...	...	183	45 0 0	
	Total ...	...	37,540 0 0	...	25,905 0 0	...	...	...	...	...	63,445 0 0	
Belgaum Division.	Myrabollams ... ... Khandis.	2,891	45,371 0 0	...	...	...	...	...	...	2,891	45,371 0 0	
	Grazing fees	...	...	...	28,261 0 0	...	...	...	...	...	28,261 0 0	
	Grass from Kurans	...	...	...	4,196 0 0	...	...	...	...	...	4,196 0 0	
	Grass from Depots	...	...	...	26 0 0	...	...	...	...	...	26 0 0	
	Grass ... ... Head-loads.	...	...	632	10 0 0	...	...	...	...	632	10 0 0	
	Thorns ... ... Cart-loads.	...	...	133	51 0 0	...	...	...	...	133	51 0 0	
	Do. ... ... Head-loads.	...	...	632	30 0 0	...	...	...	...	632	30 0 0	
	Do. ... ... Bullock-loads.	...	...	374	35 0 0	...	...	...	...	374	35 0 0	
	Karvi ... ... Cart-loads.	...	...	193	144 0 0	...	...	...	...	193	144 0 0	
	Tamarind ... ... Maunds.	...	...	6	2 0 0	...	...	...	...	6	2 0 0	
	Canes ... ... Head-loads.	...	...	61	4 0 0	...	...	...	...	61	4 0 0	
	Shigekái farm ... ... Maunds.	...	...	2,800	2,400 0 0	...	...	...	...	2,800	2,400 0 0	
	Fruit farm	...	...	...	2 0 0	...	...	...	...	...	2 0 0	
	Honey and Wax farm ... Maunds.	...	...	337	444 0 0	...	...	...	...	337	444 0 0	
	Harla farm ... ... Do.	...	...	20	32 0 0	...	...	...	...	20	32 0 0	
	Rási ... ... Bags.	...	...	62	7 0 0	...	...	...	...	62	7 0 0	
	Stones ... ... Cubic Feet.	...	...	7,713	51 0 0	...	...	...	...	7,713	51 0 0	
	Do. ... ... Cart-loads.	...	...	8,823	656 0 0	...	...	...	...	8,823	656 0 0	
	Sand ... ... Cubic Feet.	...	...	10,760	7 0 0	...	...	...	...	10,760	7 0 0	
	Muram ... ... do.	...	...	6,000	4 0 0	...	...	...	...	6,000	4 0 0	
	Earth ... ... Head-loads.	...	...	120	1 0 0	...	...	...	...	120	1 0 0	
	Do. ... ... Donkey-loads.	...	...	5,474	86 0 0	...	...	...	...	5,474	86 0 0	
	Topping fees on toddy trees	...	...	...	15 0 0	...	...	...	...	...	15 0 0	
	Wild date-palm leaves ... Cart-loads.	...	...	562	290 0 0	...	...	...	...	562	290 0 0	
	Do. do. ... Head-loads.	...	...	6,185	193 0 0	...	...	...	...	6,185	193 0 0	
	Dry palm trees ... ... No.	...	...	21	11 0 0	...	...	...	...	21	11 0 0	
	Bandurgi branches ... Head-loads.	...	...	472	22 0 0	...	...	...	...	472	22 0 0	
	Do. do. ... Cart-loads.	...	...	7	5 0 0	...	...	...	...	7	5 0 0	
	Bábul bark ... ... do.	...	...	4	8 0 0	...	...	...	...	4	8 0 0	
	Tarwad bark ... ... Head-loads.	...	...	982	92 0 0	...	...	...	...	982	92 0 0	
	Total ...	...	45,371 0 0	...	37,085 0 0	...	...	...	...	...	82,456 0 0	

FORM No. 58—*continued.*

Division.	Description of Produce.	Produce removed or utilized.										Remarks.
		By Government Agency.		By Purchasers.		By free-grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	
Dhárwár Division.	Grazing fees	...	.....	..	24,788 0 0	...	...	...	...	...	24,788 0 0	
	Honey	...	.....	...	107 0 0	...	...	...	...	...	107 0 0	
	Fruit	...	.....	...	25 0 0	...	...	...	...	...	25 0 0	
	Karanj seed	...	.....	...	443 0 0	...	...	...	...	...	443 0 0	
	Bábul-pods	...	.....	...	216 0 0	...	...	...	...	...	216 0 0	
	Myrabollams	4	66 0 0	...	69 0 0	...	...	...	...	4	135 0 0	
	Stones	... Cubic Feet.	.....	51,030	239 0 0	...	...	...	...	51,030	239 0 0	
	Earth	... Do.	.....	1,836	7 0 0	...	...	...	...	1,836	7 0 0	
	Tapping fees on toddy trees	...	.....	...	25 0 0	...	...	...	...	...	25 0 0	
	Grass	... Pullies.	129,185	253 0 0	5,050	7 0 0	...	...	...	...	137,235	260 0 0
	Grass	... Head-loads.	...	.....	3,928	121 0 0	...	...	...	...	3,928	121 0 0
	Do. for brooms	... Do.	...	.....	96	5 0 0	...	...	...	...	96	5 0 0
	Do. for thatching	... Head-loads.	...	.....	3,145	63 0 0	...	...	...	...	3,145	63 0 0
	Do.	... Cart-loads.	...	.....	117	30 0 0	...	...	...	...	117	30 0 0
	Do. from Kurans and closed numbers.		...	.....	...	1,432 0 0	...	...	...	...	...	1,432 0 0
	Toddy trees branches.	Animal-loads.	...	.....	378	30 0 0	...	...	...	...	378	30 0 0
	Do.	... Head-loads.	...	.....	370	15 0 0	...	...	...	...	370	15 0 0
	Do.	... Cart-loads.	...	.....	87	5 0 0	...	...	...	...	87	5 0 0
	Thorns	... Animal-loads.	...	.....	5,482	314 0 0	...	...	...	...	5,482	314 0 0
	Tárwád bark	...	...	.....	...	1,605 0 0	...	...	...	...	...	1,605 0 0
		Total ...	...	319 0 0	...	29,546 0 0	...	...	...	...	...	29,865 0 0
Bijápur Division.	Stones	... Cubic Feet.	...	.....	112,368	1,795 0 0	...	...	...	...	112,368	1,795 0 0
	Earth	... Do.	...	.....	11,869	114 0 0	...	...	...	...	11,869	114 0 0
	Tárwád bark	...	...	.....	...	148 0 0	...	...	...	...	...	148 0 0
	Grazing fees	...	...	.....	...	14,675 0 0	...	...	...	...	...	14,675 0 0
		Total ...	...	.....	...	16,732 0 0	...	...	...	...	...	16,732 0 0
Kolába Division.	Grass and Grazing fees	...	...	.....	...	2,947 0 0	...	...	...	...	2,947 0 0	
	Thorns and fruits	...	...	.....	...	82 0 0	...	...	...	...	82 0 0	
	Myrabollams and Shigekái	...	...	.....	...	1,238 0 0	...	...	...	...	1,238 0 0	
	Apta leaves	...	...	.....	...	516 0 0	...	...	...	...	516 0 0	
		Total ...	...	.....	...	4,783 0 0	...	...	...	...	4,783 0 0	
Ratnágiri Division.	Myrabollams	... Maunds.	15	21 0 0	...	.....	...	...	...	15	21 0 0	
	Shembe bark	...	...	.....	...	53 0 0	...	...	...	...	53 0 0	
	Fruits	...	...	.....	...	2 0 0	...	...	...	...	2 0 0	
	Fodder grass	...	...	.....	...	335 0 0	...	...	...	...	335 0 0	
		Total ...	...	21 0 0	...	390 0 0	...	...	...	...	411 0 0	

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 59.

Forest Department, Bombay, Southern Circle.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1892-93

Particulars.	No. or Quantity.	Cubic Feet.	Total of each Head. No. or Quantity.	Total of each Head. Cubic Feet.
TIMBER.				
Balance at the commencement of the year				
Northern Division of Kánara.				
Teakwood logs	9,010	254,986		
Do. round pieces	111	282		
Do. sleepers	650	975		
Do. slabs	8,094	2,065		
Do. poles	7,558	15,116		
Blackwood logs	489	11,957		
Junglewood logs	1,506	43,794		
Do. poles	7	34		
			27,425	329,809
Central Division of Kánara.				
Teak logs	7,587	90,908		
Do. poles	1,163	6,247		
Do. round pieces	5,776	29,630		
Do. sleepers	301	374		
Do. slabs	13,936	9,385		
Do. round board	1	...		
Do. ends and pieces	2,247	2,730		
Blackwood logs	472	3,566		
Do. poles	168	486		
Sitting boards	40	...		
Jeráiti pieces	975	1,272		
Miscellaneous pieces	...	12		
Junglewood logs	2,270	45,983		
			34,936	190,593
Southern Division of Kánara.				
Teakwood	480	9,654		
Do. sleepers	23	23		
Do. round sleeper pieces	3	5		
Junglewood	624	12,241		
			1,130	21,923
Belgaum Division.				
Teak logs	58	538		
Do. poles	110	461		
Junglewood	5	68		
Do. poles	10	53		
Jeráiti pieces	118	218		
			301	1,338
Dhárwár Division.				
Teak rafters	11,196	36,763		
Blackwood rafters	6	27		
Junglewood do.	55	194		
Teak jeráiti do.	1,079	2,080		
			12,336	39,064
Kolába Division.				
Teak pieces of sorts	132	426		
			132	426
Ratnágiri Division.				
Miscellaneous pieces	56	137		
			56	137
Total Balance			76,316	583,290
Received from the Forests in Depôts.				
Teak logs	13,757	298,788		
Do. poles	209,576	699,298		
Do. pieces	112	82		
Do. slabs	33	100		
Do. sleepers	2,775	3,229		
Blackwood logs	2,288	52,709		
Do. pieces	71	285		
Do. poles	109	431		
Junglewood logs	3,187	70,181		
Do. pieces	83	357		
Do. sleepers	61	112		
Do. billets	6	2		
Do. handles	3,000	160		
Do. poles	4,157	14,250		
Jeráiti pieces	4,567	8,498		
Do. wood stacks	47	1,410	243,829	1,149,832

Particulars.	No. or Quantity.	Cubic Feet.	Total of each Head. No. or Quantity.	Total of each Head. Cubic Feet.
Removed by Purchasers from Depôts.				
Teak logs	13,968	292,219		
Do. sleepers	1,354	1,979		
Do. poles	219,960	719,375		
Do. round pieces	4,004	15,097		
Do. pieces	112	82		
Miscellaneous teak pieces	...	12		
Teak slabs	5,858	2,525		
Blackwood logs	1,112	27,300		
Do. poles	208	1,042		
Junglewood logs	5,037	83,952		
Do. pieces	55	65		
Do. handles	3,000	100		
Do. sleepers	5	9		
Do. poles	3,079	10,008		
Jeráiti pieces	6,693	12,002		
Do. stacks	47	1,410		
Sitting boards	5	...		
			264,587	1,167,177
Sold locally.				
Teak logs	37	358		
Do. poles	1,763	2,510		
Do. pieces	525	490		
Do. round pieces	1,072	1,316		
Blackwood poles	45	116		
Do. pieces	9	22		
Junglewood logs	59	341		
Do. poles	1,929	2,546		
Do. pieces	1,013	1,021		
Do. stakes	371	25		
Round sleeper pieces	6	62		
Casuarina poles	53	422		
Honne logs	4	53		
Jeráiti pieces	2	3		
Harda tree	1	5		
			6,889	9,290
Used by the Department.				
Teak slabs	33	100		
Do. logs	12	103		
Blackwood pieces	8	24		
Junglewood do.	8	24		
Do. billets	6	2		
Teak rafter	1	2		
			68	255
Transferred to other Sale Depôts.				
Teak logs	2,475	43,803		
Junglewood logs	278	7,369		
			2,753	51,172
Balance at close of the year.				
Northern Division of Kánara.				
Teak logs	9,043	264,133		
Do. sleepers	46	69		
Do. slabs	8,078	2,650		
Blackwood logs	1,754	34,418		
Junglewood do.	1,414	45,009		
Do. sleepers	56	103		
Do. poles	7	34		
			20,398	346,416
Central Division of Kánara.				
Teak logs	7,369	98,419		
Junglewood logs	1,727	38,624		
Teak poles	2,464	10,412		
Blackwood logs	371	6,401		
Do. poles	50	150		
Jeráiti pieces	30	54		
Teak sleepers	2,326	2,530		
Do. slabs	8,094	6,875		
Sitting Boards	35	...		
Round teak boards	1	...		
Round teak pieces	1,893	14,815		
Teak pieces	2,247	2,730		
			27,097	181,010
Southern Division of Kánara.				
Jungle wood	394	7,869		
Sleepers	23	23		
Round sleeper pieces	3	5		
			420	7,897

FORM No. 59—*continued.*

Particulars.	No. or Quantity.	Cubic Feet.	Total of each head. No. or Quantity.	Total of each head. Cubic Feet.
Received from the Forests and sold locally.				
Teak logs	37	358		
Do. poles	1,763	2,510		
Do. pieces	525	490		
Do. round pieces	1,078	1,378		
Blackwood poles	45	116		
Do. pieces	9	22		
Junglewood logs	59	341		
Do. poles	2,092	2,658		
Do. pieces	850	909		
Do. stakes	371	25		
Casuarina poles	53	422		
Honne logs	4	53		
Jeraiti pieces	2	3		
Harda tree	1	5		
			6,389	9,290
Received by transfer from Sale Depôts.				
Teak logs	2,475	43,803		
Junglewood logs	278	7,369		
			2,753	51,172
Total, Timber	...	.....	329,787	1,793,584
Balance at commencement of the year.				
Central Division of Kánara.				
Firewood	...	2,596		
			...	2,596
Southern Division of Kánara.				
Firewood	...	12,762		
			...	12,762
Belgaum Division.				
Firewood	...	212,139		
			...	212,139
Dhárwár Division.				
Firewood	...	28,332		
			...	28,332
Ratnágiri Division.				
Firewood	...	250	...	250
Total, Balance	...	.....	...	256,079
Received from the Forests in Depôts.				
Firewood	...	2,824,085		
Charcoal Muras.	129	.....		
			129	2,824,085
Received from the Forests and sold locally.				
Firewood	...	5,790	...	5,790
Total, Firewood and Charcoal	...	.....	129	3,085,954
Balance at commencement of the year.				
Belgaum Division.				
Bamboos	50	.....	50	.....
Received from the Forests in Depôts.				
Bamboos	5,300	.....	5,300	.....
Received from the Forests and sold locally.				
Bamboos	294	.....	294	.....
Total, Bamboos	...	.....	5,644	.....
Balance at commencement of the year.				
Central Division of Kánara.				
Sandalwood ...Trees.	10	.....	...	.....
Do. Billets.	70	.....	...	.....
Do. Chips.	...	0-3-0	...	.....
Do. whitewood... Stacks.	1	.....	...	.....
Southern Division of Kánara.				
Sandalwood chips ...Carts.	5	.....	...	.....
Do. billets	1	.....	...	.....
Do. oil ...Tolas.	85½	.....	...	.....
Dhárwár Division.				
Sandalwood ...Roots.	144	.....	...	.....
Do. Branches.	23	.....	...	.....

Particulars.	No. or Quantity.	Cubic Feet.	Total of each head. No. or Quantity.	Total of each head. Cubic Feet.
TIMBER—*continued.*				
Balance at close of the year —*continued.*				
Belgaum Division.				
Junglewood poles	134	1,165		
Do. pieces	20	268		
Blackwood poles	10	126		
Teak poles	11	21		
			175	1,580
Dhárwár Division.				
Teak rafters	1,267	4,286		
Junglewood rafters	29	137		
Jeraiti do.	16	12		
			1,312	4,435
Kolába Division.				
Teak pieces of sorts	6,088	24,352	6,088	24,352
Total, Balance	...	.....	55,490	565,690
Total, Timber	...	.....	329,787	1,793,584
FIREWOOD.				
Removed by Purchasers from Depôts.				
Firewood	...	2,878,336		
Charcoal Muras.	129	.....		
			129	2,878,336
Sold locally.				
Firewood	...	5,790	...	5,790
Lost or written off as useless.				
Firewood	...	19,931	...	19,931
Balance at close of the year.				
Central Division of Kánara.				
Firewood	...	2,510	...	2,510
Southern Division of Kánara.				
Firewood	...	270	...	270
Belgaum Division.				
Firewood	...	146,591	...	146,591
Dhárwár Division.				
Firewood	...	32,526	...	32,526
Total, Balance	...	.....	...	181,897
Total, Firewood and Charcoal	...	.....	129	3,085,954
BAMBOOS.				
Removed by Purchasers from Depôts.				
Bamboos	350	.....	350	.....
Sold locally.				
Bamboos	294	.....	294	.....
Used by the Department.				
Bamboos	5,000	.....	5,000	.....
Total, Bamboos	...	.....	5,644	.....
SANDALWOOD.				
Removed by Purchasers from Depôts.				
Sandalwood ...Trees	141	.....	...	.....
Do. ...Roots	82	.....	...	.....
Do. ...Pieces	3	.....	...	.....
Do. ...Billets	9,913	.....	...	.....
Do. chips ...Carts	26½	.....	...	.....
Do. do. ...Khandis.	...	38-11-0	...	.....
Do. ...Stacks	3	.....	...	.....
Do. whitewood ... Do.	9	.....	...	.....
Do. do. ...Billets	187	.....	...	.....
Do. oil ...Tolas	85½	.....	...	.....
Do. Saw-dust ...Bags	24	.....	...	.....
Do. do. ...Khandis.	...	0-6-0	...	.....

FORM No. 59—*concluded.*

Particulars.	No. or Quantity.	Cubic Feet.	Total of each head. No. or Quantity.	Total of each head. Cubic Feet.	Particulars.	No. or Quantity.	Cubic Feet.	Total of each heads. No. or Quantity.	Total of each heads. Cubic Feet.
					SANDALWOOD—*continued.*				
					Sold locally.				
RECEIVED FROM THE FORESTS IN DEPÔTS.					Sandalwood .. .. .. Trees.	1,961			
Sandalwood ... ... Trees.	1,949	..			Do. .. .. .. Branches.	43			
Do. .. ..Branches..	528	..			Do. .. .. .. Pieces.	196			
Do. .. .. Pieces.	359	..			Do. .. .. .. Roots.	17			
Do. .. .. Roots.	193	..			*Converted in Depôts.*				
Do. .. .. Billets.	2,431	..			Sandalwood .. .. .. Trees.	1,818			
Do. fellings and saw dust ... ... Bags.	23	..			Do. .. .. .. Branches.	551			
Do. Chips ... ... Carts.	21½	..			Do. .. .. .. Roots.	277			
Do. white wood ... Billets.	187	..			Do. .. .. .. Pieces.	330			
RECEIVED FROM THE FORESTS AND SOLD LOCALLY.					BALANCE AT CLOSE OF THE YEAR.				
					Central Division of Kánara.				
Sandalwood ... ... Trees.	1,961	..			Sandalwood .. .. .. Billets.	2			
Do. ... ... Branches.	43	..			*Southern Division of Kánara.*				
Do. ... ... Roots.	17	..			Sandalwood .. .. .. Billets.	2			
Do. ... ... Pieces.	196	..			*Dhárwár Division.*				
RECEIVED BY CONVERSION IN DEPÔTS.					Sandalwood .. .. .. Billets.	63			
Sandalwood billets ...	7,478	..			Do. .. .. .. Roots.	60			
Do. chips ... ... Khandis.	..	38-8-0			Do. .. .. .. Pieces.	26			
Do. saw dust ... Khandis.	..	0-6-0							
Do. white wood ... Carts.	8	..							
Do. ... ... Roots.	82	..							
Do. chips ... ... Stacks.	3	..							
					MINOR PRODUCE.				
BALANCE AT COMMENCEMENT OF THE YEAR.					REMOVED BY PURCHASERS FROM DEPÔTS.				
Northern Division of Kánara.					Myrabollams .. .. Khandis.	..	5,678-16-21½		
Myrabollams ... ... Khandis.	..	34-0-0			Shigekai .. .. .. Khandis.	..	66-1-1½		
Divi Divi seed ... ... Bags.	18	..	18	34-0-0	Grass .. .. .. Bundles.	155,555	..		
Central Division of Kánara.					Divi Divi seed .. .. Bags.	31½	..	155,556	5,744-17-2
Myrabollams ... ... Khandis.	..	1-18-27			*Lost or written off as useless.*				
Shigekai ... ... Khandis.	..	1-16-11½			Shigekai .. .. .. Khandis.	..	5-19-15½		
Grass... ... ... Bundles.	134,993	..	134,993	*3-10-10½	Grass .. .. .. Bundles.	119,813	..	119,813	5-19-1
Southern Division of Kánara.					*Sold locally.*				
Myrabollams ... ... Khandis.	..	433-0-1			Myrabollams .. .. Khandis.	..	0-23-3	..	0-23-3
Shigekai ... ... Khandis.	..	40-7-21		473-7-22					
Belgaum Division.					*Used by the Department.*				
Myrabollams .. .. Khandis.	..	140-2-0	..	140-2-0	Grass .. .. .. Bundles.	75,202	..		
Dhárwár Division.					Myrabollams .. .. Khandis.	..	0-11-27	75,202	0-11-27
Grass .. .. Bundles.	143,055	..	143,055		BALANCE AT CLOSE OF THE YEAR.				
Total, Balance ..	..	..	278,048	*650-20-4½	*Central Division of Kánara.*				
RECEIVED FROM THE FORESTS IN DEPÔTS.					Grass .. .. Bundles.	24,725	..		
Myrabollams .. .. Khandis.	..	5,076-16½			Shigekai .. .. .. Khandis.	..	0-2-2		
Shigekai .. .. .. Khandis.	..	47-6-6			Myrabollams .. .. Khandis.	..	1-19-0	24,725	1-21-2
Grass .. .. Bundles.	97,247	..			*Southern Division of Kánara.*				
Divi Divi seed .. .. Bags.	13½	..	97,247 13½	5,123-22-6½	Myrabollams .. .. Khandis.	..	4-14-8		
RECEIVED FROM FORESTS AND SOLD LOCALLY.					Shigekai .. .. .. Khandis.	..	17-7-20	..	21-22-0
Myrabollams .. .. Khandis.	..	0-23-3	..	0-23-3	Total, Balance ..	..		24,725	23-18-2
Total, Minor Produce ..			375,295	5,775-15-14½	Total, Minor Produce ..	..		375,295	5,775-15-14½

* The difference is owing to the weighment of myrabollams and shigekai having been taken this year at 25 maunds a khandi instead of 20 maunds as taken last year.

Belgaum, 25th September 1893.

J. L. L. MACGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 60.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1892-93.

Description of Timber and other Produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
			Rs. a. p.			Rs. a. p.			
TIMBER.									
Northern Division of Kánara.									
Teakwood logs	9,010	2,54,986	3,25,786 0 0	9,043	2,64,133	3,15,947 0 0	.....	9,839	
Blackwood logs	489	11,957	11,479 0 0	1,754	34,418	25,535 0 0	14,056	.....	
Junglewood logs	1,506	43,794	35,035 0 0	1,414	45,009	36,010 0 0	975	.....	
Teak round pieces	111	282	55 0 0	.....	.....	.....	.....	55	
Do. sleepers	650	975	325 0 0	46	69	10 0 0	.....	315	
Do. slabs	8,094	2,665	108 0 0	8,078	2,650	100 0 0	.....	8	
Junglewood sleepers	.....	.....	.....	56	103	40 0 0	40	.....	
Do. poles	7	34	5 0 0	7	34	5 0 0	.....	.....	
Teak do.	7,558	15,116	911 0 0	.....	.....	.....	.....	911	
Total	.....	.....	3,73,704 0 0	.....	.....	3,77,647 0 0	15,071	11,128	
Central Division of Kánara.									
Logs	10,329	1,40,457	1,34,840 0 0	9,967	1,43,444	1,37,707 0 0	2,867	.....	Include teak, blackwood and junglewood.
Teak round pieces	5,776	29,630	5,776 0 0	1,883	14,815	2,888 0 0	.....	2,888	
Do. sleepers	301	374	240 0 0	2,326	2,530	1,623 0 0	1,383	.....	
Do. slabs	13,936	9,385	770 0 0	8,094	6,875	564 0 0	.....	206	
Do. poles	1,163	6,247	1,990 0 0	2,464	10,412	3,316 0 0	1,326	.....	
Sitting boards	40	.....	6 0 0	35	.....	5 0 0	.....	1	
Miscellaneous scantlings	.....	12	10 0 0	.....	.....	.....	.....	10	
Round teak board	1	.....	0 5 0	1	.....	0 5 0	.....	.....	
Blackwood poles	168	486	84 0 0	50	150	25 0 0	.....	59	
Jeráitiwood pieces	975	1,272	91 0 0	30	54	3 0 0	.....	88	
Teak ends and pieces	2,247	2,730	55 0 0	2,247	2,730	55 0 0	.....	.....	
Total	.....	.....	1,43,862 5 0	.....	.....	1,46,186 5 0	5,576	3,252	
Southern Division of Kánara.									
Teakwood	480	9,653	14,479 0 0	.....	.....	.....	.....	14,479	
Junglewood	624	12,242	12,242 0 0	394	7,869	7,869 0 0	.....	4,373	
Sleepers	23	23	46 0 0	23	23	46 0 0	.....	.....	
Round sleeper pieces	3	5	2 0 0	3	5	2 0 0	.....	.....	
Total	.....	.....	26,769 0 0	.....	.....	7,917 0 0	.....	18,852	
Belgaum Division.									
Teak logs	58	538	387 0 0	.....	.....	.....	.....	387	
Do. poles	110	461	37 0 0	11	21	8 0 0	.....	29	
Blackwood poles	.....	.....	.....	10	126	20 0 0	20	.....	
Junglewood logs	5	68	38 0 0	.....	.....	.....	.....	38	
Do. poles	10	53	1 0 0	134	1,165	267 0 0	266	.....	
Do. pieces	.....	.....	.....	20	268	50 0 0	50	.....	
Jeraiti do.	118	218	65 0 0	.....	.....	.....	.....	65	
Total	.....	.....	528 0 0	.....	.....	345 0 0	336	519	
Dhárwár Division.									
Teak rafters	11,196	36,763	18,000 0 0	1,267	4,286	1,200 0 0	.....	11,800	
Blackwood rafters	6	27	7 0 0	.....	.....	.....	.....	7	
Junglewood do.	55	196	60 0 0	29	137	24 0 0	.....	36	
Jeráiti pieces	1,079	2,080	390 0 0	16	12	3 0 0	.....	387	
Total	.....	.....	13,457 0 0	.....	.....	1,227 0 0	.....	12,230	
Kolába Division.									
Teak pieces of sorts	132	426	150 0 0	6,088	24,352	2,100 0 0	1,950	.....	
Total	.....	.....	150 0 0	.....	.....	2,100 0 0	1,950	.....	
Ratnágiri Division.									
Teak poles and pieces	56	137	18 0 0	.....	.....	.....	.....	18	
Total	.....	.....	18 0 0	.....	.....	.....	.....	18	
Total, Timber	.....	.....	5,58,488 5 0	.....	.....	5,35,422 5 0	22,933	45,999	
FIREWOOD.									
Central Division of Kánara.									
Firewood	.....	2,596	74 0 0	.....	2,510	71 0 0	.....	3	
Southern Division of Kánara.									
Firewood stacks	709	12,762	502 0 0	15	270	12 0 0	.....	490	
Belgaum Division.									
Firewood stacks	6,160	1,92,544	8,647 0 0	1,341	44,259	1,880 0 0	.....	6,767	
Running Firewood	.....	18,203	1,835 0 0	.....	1,02,332	10,315 0 0	8,480	.....	
Lighting do.	.....	1,392	69 0 0	.....	.....	.....	.....	69	
Total	.....	.....	10,551 0 0	.....	.....	12,195 0 0	8,480	6,836	

FORM No. 60—*continued.*

Description of Timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
FIREWOOD—*continued.*									
Dhárwár Division.			Rs. a. p.			Rs. a. p.			
Firewood stacks	1,574	28,332	1,574 0 0	1,807	32,526	1,807 0 0	233	.....	
Ratnágiri Division.									
Firewood ... ... Khandis	10	250	1 0 0	.....	.....	.....	.....	1	
Total, Firewood ...	.....	.....	12,702 0 0	.....	.....	14,085 0 0	8,713	7,330	
SANDALWOOD.									
Central Division of Kánara.									
Trees	10	.....	20 0 0	.....	.....	.....	.....	20	
Billets and chips	.....	0 18 9½	75 0 0	2	0 0 15½	2 0 0	.....	73	
White wood	1	.....	5 0 0	.....	.....	.....	.....	5	
Total ...	.....	.....	100 0 0	.....	.....	2 0 0	.....	98	
Southern Division of Kánara.									
Sandalwood ... ... Khandis	.....	0 14 0	3 0 0	2	0 1 0	7 0 0	4	.....	
Do. oil ... ... Tolas	85½	.....	22 0 0	.....	.....	.....	.....	22	
Do. chips ... ... Carts	5	.....	22 0 0	.....	.....	.....	.....	22	
Total ...	.....	.....	47 0 0	.....	.....	7 0 0	4	44	
Dhárwár Division.									
Sandal-wood roots	144	.....	120 0 0	60	.....	20 0 0	.....	100	
Do. branches	23	.....	2 0 0	.....	.....	.....	.....	2	
Do. billets	.....	.....	.....	63	.....	80 0 0	80	.....	
Do. pieces	.....	.....	.....	26	.....	5 0 0	5	.....	
Total ...	.....	.....	122 0 0	.....	.....	105 0 0	85	102	
Total, Sandalwood ...	.....	.....	269 0 0	.....	.....	114 0 0	89	244	
BAMBOOS.									
Belgaum Division.									
Bamboos	50	.....	1 3 0	.....	.....	.....	.....	1 3 0	
MINOR PRODUCE.									
Northern Division of Kánara.									
Myrabollams ... ... Khandis	.....	34 0 0	674 0 0	.....	.....	.....	.....	674	
Divi-divi seed ... ... Bags	18	.....	25 0 0	.....	.....	.....	.....	25	
Total ...	.....	.....	699 0 0	.....	.....	.....	.....	699	
Central Division of Kánara.									
Grass ... ... Bundles	134,993	.....	420 0 0	24,725	.....	76 0 0	.....	344	
Shigekái ... . Khandis	.....	1 16 11½	25 0 0	.....	0 2 2	1 0 0	.....	24	
Myrabollams ... ... Do.	.....	1 18 27	40 0 0	.....	1 19 0	40 0 0	.....	.....	
Total ...	.....	.....	485 0 0	.....	.....	117 0 0	.....	368	
Southern Division of Kánara.									
Myrabollams ... ... Khandis	.....	433 0 1	8,715 0 0	.....	4 14 8	86 0 0	.....	8,629	
Shigekai ... ... Do.	.....	40 7 21	800 0 0	.....	17 7 20	357 0 0	.....	443	
Total ...	.....	.....	9,515 0 0	.....	.....	443 0 0	.....	9,072	
Belgaum Division.									
Myrabollams ... ... Khandis	.....	140 2 0	2,509 0 0	.....	.....	.....	.....	2,509	
Dhárwár Division.									
Grass ... ... Bundles	143,055	.....	175 0 0	.....	.....	.....	.....	175	
Total, Minor Produce ...	.....	.....	13,383 0 0	.....	.....	560 0 0	.....	12,823	
Grand Total ...	.....	.....	584,843 8 0	.....	.....	550,181 5 0	31,735	66,397 3 0	

Net difference against the year, Rs. 34,662-3-0.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 25th September 1893.

FORM No. 60 A.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Abstract showing the Value of Live and Dead Stock for the year 1892-93.

Description of Dead and Live Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
		Rs.		Rs.	Rs.	Rs.	
Direction.							
Office tents	2	902	2	902	...	...	
Tools, plant and office furniture ...	...	339	...	423	84	...	
Total ...	...	1,241	...	1,325	84	...	
Northern Division of Kánara.							
Forest bungalow at Haliyál ...	1	2,700	1	2,700	...	...	
Range forest office at Haliyál ...	1	900	1	900	...	...	
Divisional forest office at Haliyál...	1	350	1	350	...	...	
Forest nákás	11	3,324	11	3,324	...	...	
Forest bungalow at Kadra ...	1	8,100	1	8,100	...	...	
Kodibág Depôt House ...	1	4,960	1	4,960	...	...	
Hill tent	1	350	1	350	...	...	
Tools, plant and office furniture ...	...	3,082	...	3,092	10	...	
Total ...	...	23,766	...	23,776	10	...	
Central Division of Kánara.							
Forest bungalows at Yellápur ..	2	3,050	2	3,050	...	...	
Workshop at Yellápur ...	1	114	1	114	...	...	
Rest-house at Kolikeri ...	1	908	1	908	...	...	
Náka houses	17	5,001	19	5,601	600	...	
Old Range office at Yellápur ...	1	250	1	250	...	...	
Rest-house at Ramanguli ...	1	150	1	150	...	...	
Tent	1	350	1	350	...	...	
Range forest office at Ankola ...	1	300	1	300.	...	...	
Tools, plant and office furniture ...	...	4,292	...	4,442	150	...	
Buffaloes	208	6,779	52	1,680	...	5,099	37 buffaloes died, and the rest were sold.
Carts	100	3,198	40	1,400	...	1,798	The carts were disposed of along with the buffaloes.
Total ...	...	24,392	...	18,245	750	6,897	
Southern Division of Kánara.							
Divisional forest office at Sirsi ...	1	1,717	1	1,717	...	...	
Depôt House at Sirsi... ...	1	1,119	1	1,219	100	...	Rs. 100 were spent in renewing the roof of the Depôt House,
Forest nákás	21	6,102	21	6,102	...	...	
Rest-house at Bilki	1	300	1	300	...	...	
Office tent	1	350	1	350	...	...	
Tools, plant and office furniture ...	...	3,104	...	3,229	125	...	
Total ...	...	12,692	...	12,917	225	...	
Belgaum Division.							
Tent	1	300	1	300	...	...	
Rest-house	1	2,500	1	2,500	...	...	
Nákás	18	7,480	18	7,480	...	...	
Tools, plant and office furniture ...	...	3,942	...	4,208	266	...	
Total ...	...	14,222	...	14,488	266	...	

FORM No. 60 A—*continued.*

Description of Dead and Live Stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in Value.		Remarks.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
Dhárwár Division.		Rs.		Rs.	Rs.	Rs.	
Rest-house	1	800	1	800	...	...	
Watch-houses	9	2,700	9	2,700	...	...	
Tent	1	350	1	350	...	...	
Tools, plant and office furniture ...	...	3,023	...	3,339	316	...	
Depôt House at Hubli ...	...	...	1	999	999	...	
Total ...	...	6,873	...	8,188	1,315	...	
Bijápur Division.							
Office tent	1	150	1	150	...	...	
Tools, plant and office furniture ...	...	812	...	859	47	...	
Total ...	...	962	...	1,009	47	...	
Kolába Division.							
Hill tent, old	1	250	1	250	...	...	
Forest boat with fittings ...	1	300	1	300	...	...	
Swiss cottage tent	...	...	1	380	380	...	Newly purchased.
Tools, plant and office furniture ...	...	2,210	...	2,954	744	...	
Total ...	...	2,760	...	3,884	1,124	...	
Ratnágiri Division.							
Hill tent	1	200	1	200	...	...	
Tools, plant and office furniture ...	...	*467	...	468	1	...	*528 buttons "F. D." worth Rs. 45 were transferred to the Belgaum Division.
Total ...	...	667	...	668	1	...	
Working Plans Division.							
Tents	2	500	2	500	...	...	
Tools, plant and office furniture ...	...	2,721	...	2,940	219	...	
Total ...	...	3,221	...	3,440	219	...	
Grand Total ...	...	90,796	...	87,940	4,041	6,897	

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 25th September 1893.

FORM No. 61.

Forest Department, Bombay, Southern Circle.

Summary of Revenue and Expenditure of the different Divisions during the Forest year 1892-93, from April 1892 to 30th June 1893.

Budget Heads.	Direction.	North Kánara Division.	South Kánara Division.	Central Kánara Division.	Dhárwár Division.	Kolába Division.	Ratnágiri Division.	Belgaum Division.	Bijápur Division.	Forest Survey Charges.	Total for the Forest year 1892-93.
REVENUE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other Produce removed from the Forests by Government Agency—											
a. Timber	.....	3,16,382 8 6	19,610 3 8	83,694 13 8	21,415 2 4	1,19,023 1 3	2,316 1 0	22,918 12 1	.....	.....	5,85,360 10 6
b. Firewood and Charcoal	.....	20,416 14 7	999 6 0	2,089 9 6	8,220 2 0	1,338 10 0	152 1 0	2,08,753 14 6	.....	.....	2,41,970 9 7
c. Bamboos	.....	5 8 0	.....	91 8 0	.....	.....	.....	1 3 0	.....	.....	98 3 0
d. Sandalwood	.....	.....	6,212 4 0	2,848 9 0	8,791 1 2	.....	.....	290 9 0	.....	.....	18,142 7 2
e. Grass and other minor produce	.....	12,107 4 5	38,844 4 7	5,457 9 2	321 7 5	0 14 3	21 0 0	45,412 9 11	.....	.....	1,02,165 1 9
Total I	.....	3,48,912 3 6	65,696 2 3	94,182 1 4	38,747 12 11	1,20,362 9 6	2,489 2 0	2,77,377 0 6	.....	.....	9,47,767 0 0
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—											
a. Timber	.....	21,434 12 4	15,485 6 7	13,581 5 9	815 2 3	34,153 5 9	7,952 3 8	2,525 11 2	520 9 0	.....	96,468 8 6
b. Firewood and Charcoal	.....	30,473 1 6	5,258 8 8	25,217 12 8	1,019 15 5	21,099 7 5	1,001 14 1	8,386 6 3	9,791 2 3	.....	1,02,248 4 3
c. Bamboos	.....	34,687 11 1	1,280 14 6	13,697 14 3	6,581 4 6	.....	1 2 0	8,893 4 2	10 2 6	.....	65,157 5 0
d. Grazing and fodder grass	.....	13,251 15 9	19,002 6 9	13,047 1 6	26,348 0 8	2,940 14 9	334 15 3	32,493 4 0	14,675 11 2	.....	1,22,100 5 10
e. Other minor produce	.....	2,106 2 8	6,888 8 6	5,690 6 0	3,199 2 9	1,835 12 0	184 0 8	4,733 6 10	3,489 1 2	.....	28,126 8 7
Total II	.....	1,01,953 11 4	47,915 13 0	71,234 8 2	37,963 9 7	60,029 7 11	9,474 3 8	57,037 0 5	28,486 10 1	.....	4,14,101 0 2
III.—Drift and Waif Wood and Confiscated Forest Produce	.....	82 12 2	386 10 9	4,999 5 6	162 6 9	867 0 3	116 12 7	291 0 5	62 7 0	.....	6,968 7 5
Total III	.....	82 12 2	386 10 9	4,999 5 6	162 6 9	867 0 3	116 12 7	291 0 5	62 7 0	.....	6,968 7 5
IV.—Revenue from Forests not managed by Government—											
a. Duty on foreign timber and other forest produce.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	838 6 8	1 0 8	.....	.....	.....	839 7 4
Total IV	.....	.....	.....	.....	.....	838 6 8	1 0 8	.....	.....	.....	839 7 4
V.—Miscellaneous—											
a. Fines and forfeitures	.....	791 5 8	.....	3 15 3	33 9 11	3,490 9 2	28 0 0	250 0 0	200 14 0	.....	4,798 6 0
b. Refunds	69 3 6	102 6 8	177 1 6	62 9 5	80 7 5	331 3 9	2 0 0	6 3 7	126 10 2	.....	957 14 0
c. Other sources	2 4 0	598 5 4	1,082 6 7	925 10 0	407 15 8	1,112 9 7	442 15 11	4,305 11 0	61 5 6	.....	8,939 3 7
Total V	71 7 6	1,492 1 8	1,259 8 1	992 2 8	522 1 0	4,934 6 6	472 15 11	4,561 14 7	388 13 8	.....	14,695 7 7
Grand Total Revenue	71 7 6	4,52,440 12 8	1,15,258 2 1	1,71,408 1 8	77,395 14 3	1,87,037 14 10	12,554 2 10	3,39,266 15 11	28,937 14 9	.....	13,84,371 6 6
EXPENDITURE.											
A.—Conservancy and Works.											
I.—Timber and other Produce removed from the Forests by Government Agency—											
a. Timber	.....	92,801 5 2	5,534 9 7	31,376 7 10	3,401 4 8	26,145 4 6	256 0 5	5,035 14 3	.....	.....	1,64,550 14 5
b. Firewood	.....	13,355 15 2	352 14 0	1,541 12 10	2,422 7 0	16 7 0	.....	94,701 5 5	276 0 0	.....	1,12,666 13 5
c. Bamboos	.....	2 4 0	.....	.....	.....	.....	.....	.....	.....	.....	2 4 0
d. Sandalwood	.....	0 10 0	805 14 0	277 13 9	596 13 5	.....	.....	18 8 0	.....	.....	1,699 11 2
e. Grass and other minor produce	.....	4,036 4 0	13,597 12 10	2,672 15 5	9 15 0	.....	10 3 2	9,075 8 2	.....	.....	29,402 10 7
Total A I	.....	1,10,196 6 4	20,291 2 5	35,869 1 10	6,430 8 1	26,161 11 6	266 3 7	1,08,831 3 10	276 0 0	.....	3,08,322 5 7

FORM No. 61—*continued.*

Budget Heads.	Direction.	North Kánara Division.	South Kánara Division.	Central Kánara Division.	Dhárwár Division.	Kolába Division.	Ratnágiri Division.	Belgaum Division.	Bijápur Division.	Forest Surveys Charges.	Total for the Forest Year 1893-94.
EXPENDITURE—*continued.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works—*continued.*											
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers	....	1,014 9 3	1,576 1 3	1,096 3 0	1,675 10 9	2,230 14 7	74 0 9	1,632 4 3	989 12 0	....	10,289 7 10
Total A II	....	1,014 9 3	1,576 1 3	1,096 3 0	1,675 10 9	2,230 14 7	74 0 9	1,632 4 3	989 12 0	....	10,289 7 10
III.—Drift and Waif Wood and confiscated Forest Produce	....	3 8 0	1 6	8 3 11	2 12 0	22 5 5	10 4 0	7 7 6	....	....	62 10 4
Total A III	....	3 8 0	8 1 6	8 3 11	2 12 0	22 5 5	10 4 0	7 7 6	....	....	62 10 4
IV.—Revenue from Forests not managed by Government—											
a. Duty on foreign timber and other forest produce	....	....	....	....	....	....	....	....	....	....	....
b. Revenue from shared and private forests	....	....	....	....	....	....	....	....	....	....	....
Total A IV	....	....	....	....	....	....	....	....	....	....	....
V—Rent of leased Forests and Payments to shareholders in Forests managed by Government	....	....	....	....	....	10,275 0 2	....	....	....	....	10,275 0 2
Total A V	....	....	....	....	....	10,275 0 2	....	....	....	....	10,275 0 2
VI.—Live Stock, Stores, Tools and Plant—											
a. Purchase of cattle	....	....	....	....	....	....	....	....	....	....	....
b. Feed and keep of cattle	....	6 10 0	....	9,918 3 7	....	....	....	521 12 9	....	....	10,446 10 4
c. Purchase of stores, tools and plant	....	314 3 11	70 7 1	644 2 5	312 14 10	1,117 4 4	29 6 0	206 14 4	....	..	2,695 4 11
Total A VI	....	320 13 11	70 7 1	10,562 6 0	312 14 10	1,117 4 4	29 6 0	728 11 1	....	....	13,141 15 3
VII.—Communications and Buildings—											
a. Roads and bridges	....	585 7 7	90 0 0	562 8 0	....	....	45 14 0	1,071 4 0	....	....	2,355 1 7
b. Buildings	....	418 4 0	416 13 11	1,648 14 3	1,140 9 9	96 4 0	7 2 9	550 0 8	14 10 6	....	4,292 11 10
c. Other Works	....	791 11 8	524 4 6	578 8 1	1 10 6	....	....	10 3 0	....	....	1,906 5 9
Total A VII	....	1,795 7 3	1,031 2 5	2,789 14 4	1,142 4 3	96 4 0	53 0 9	1,631 7 8	14 10 6	....	8,554 3 2
VIII.—Demarcation, Improvement, and Extension of Forests—											
a. Demarcation	....	522 5 10	2,034 14 3	5,577 8 3	3,637 0 3	596 7 2	....	....	8 0 0	....	12,376 3 9
b. Compensation for land and rights	....	....	510 0 0	....	1,451 4 0	....	....	....	....	....	1,961 4 0
c. Surveys	....	28,489 0 9	....	....	15 9 6	4,519 0 1	....	70 3 6	....	* 8,735 4 2	41,829 1 3
d. Working-plans	243 8 3	14,658 6 3	....	....	....	....	....	....	....	....	14,901 14 6
e. Sowing and planting	....	519 15 5	....	1,135 11 1	214 12 5	10 8 0	77 15 0	188 14 10	16 12 0	....	2,164 8 9
f. Protection from fire	....	15,387 15 3	1,126 4 0	7,047 15 3	628 14 6	77 8 0	....	2,303 12 0	499 12 7	....	27,972 1 7
g. Other Works	....	....	....	....	....	....	....	....	....	....	....
Total A VIII	243 8 3	59,577 10 9	3,671 2 3	13,761 2 7	5,947 8 8	5,203 7 3	77 15 0	2,562 14 4	524 8 7	8,735 4 2	1,00,305 1 10
IX.—Miscellaneous—											
a. Refunds	....	....	....	....	....	....	....	....	....	....	....
b. Law charges	....	....	80 11 6	....	....	....	....	81 11 2	....	....	162 6 8
c. Other charges	0 2 0	2,012 9 9	1,279 8 9	1,192 11 10	826 1 2	1,313 8 8	389 0 2	2,224 5 4	514 9 6	....	9,752 9 2
Total A IX	0 2 0	2,012 9 9	1,360 4 3	1,192 11 10	826 1 2	1,313 8 8	389 0 2	2,306 0 6	514 9 6	....	9,914 15 10
											*8,735 4 2
											4,52,130 7 10
Total A.—Conservancy and Works	243 10 3	1,74,921 1 3	23,008 5 2	65,279 11 6	16,337 11 9	46,420 7 11	899 14 3	1,17,700 1 2	2,319 8 7	*8,735 4 2	4,60,865 12 0

* Amounts of Forest Survey expenditure added as per the Superintendent's letter No. 193, dated 4th August 1893, made by the Superintendent, Bombay Forest Surveys. *Vide* copy sent to the Conservator with No. F.-13890, dated 14th August 1893, in April, May and June 1893 in Northern Division, Kánara (Rs. 5,189-6-8) and Kolába (Rs. 3,545-13-6).

B.—ESTABLISHMENT.

I.—Salaries—											
a. Conservators	17,955 2 7	....	.. ..	....	....	....	....	....	....	....	17,955 2 7
b. Superior Officers	2,490 0 0	41,463 9 6	9,782 12 10	9,061 8 10	13,445 15 4	9,969 13 5	3,427 6 9	9,887 0 8	....	....	1,04,564 2 8
c. Subordinate Forest and Depôt Establishments	7 7 5	21,763 12 9	13,924 7 7	15,343 6 2	15,739 5 6	34,899 0 6	8,923 10 8	27,860 0 6	5,125 15 4	....	1,46,948 9 2
d. Office Establishments	7,618 2 4	4,921 3 0	2,909 15 11	3,685 8 6	2,183 5 4	2,818 9 11	746 1 8	2,853 6 8	8,577 6 1	....	28,810 13 10
e. Deputation and Special Allowances	546 0 0	1,349 0 0	....	....	....	12 0 0	....	9 0 0	1,074 8 6	....	1,916 0 0
Total B I	28,526 12 4	69,497 9 3	26,617 4 4	28,090 7 6	31,368 10 2	47,699 7 10	13,097 3 1	40,609 7 10	14,777 13 11	....	3,00,194 12 3
II.—Travelling Allowances—											
a. Conservators	3,156 2 4	....	....	....	....	....	....	....	....	....	3,156 2 4
b. Superior Officers	720 0 0	8,342 9 0	1,974 3 1	1,898 0 0	2,204 10 0	2,534 6 5	1,317 4 4	2,310 0 0	1,457 13 8	....	22,788 14 6
c. Subordinate Forest and Depôt Establishments	....	1,412 8 5	643 5 4	239 8 8	1,455 3 6	1,481 13 9	784 15 1	1,809 3 10	300 0 0	....	8,826 10 7
d. Office Establishments	2,559 0 9	1,564 3 2	926 2 3	1,055 15 7	681 9 10	978 13 3	283 10 2	820 0 7	416 0 9	....	9,285 8 4
Total B II	6,435 3 1	11,319 4 7	3,543 10 8	3,893 8 3	4,341 7 4	4,995 1 5	2,415 13 7	4,939 4 5	2,173 14 5	....	44,057 3 9
III.—Contingencies—											
a. Stationery	1 9 3	166 1 4	525 0 1	445 9 6	147 1 9	469 0 4	182 14 5	358 2 4	172 14 0	....	2,468 5 0
b. Carriage of Tents and Records	723 7 4	524 4 3	303 10 6	459 7 10	209 3 6	375 8 6	181 4 6	214 8 6	109 9 6	....	3,101 0 5
c. Rents, Rates and Taxes	400 0 0	25 0 0	....	280 0 0	59 0 0	233 0 0	244 5 2	499 14 11	84 8 0	....	1,825 12 1
d. Pay of Police Guards	....	....	....	....	....	....	....	....	....	....	....
e. Official Postage	332 14 0	391 8 0	546 15 0	576 3 0	382 9 0	995 10 0	405 13 0	554 2 0	135 8 0	....	4,321 2 0
f. Sundries	522 5 7	220 2 4	369 9 11	204 8 4	167 15 4	254 15 3	122 6 9	317 8 3	128 9 1	....	2,308 0 10
Payments to Officers of other Provinces	....	....	....	....	....	....	....	....	....	....	....
Total B III	1,980 4 2	1,326 15 11	1,745 3 6	1,965 12 8	965 13 7	2,328 2 1	1,136 11 10	1,944 4 0	631 0 7	....	14,024 4 4
Total, B.—ESTABLISHMENT	36,942 3 7	82,143 13 9	31,906 2 6	33,949 12 5	36,675 15 1	54,932 11 4	16,649 12 6	47,493 0 3	17,582 12 11	....	3,58,276 4 4
											8,735 4 2
GRAND TOTAL OF EXPENDITURE	37,185 13 10	2,57,064 15 0	59,914 7 8	99,229 7 11	53,013 10 10	1,01,353 3 3	17,549 10 9	1,65,193 1 5	19,902 5 6	8,735 4 2	8,10,406 12 2
											8,19,142 0 4

A. F. COX,
Accountant General.

FORM No. 62.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Annual Account Current for the Forest year 1892-93, extending from 1st April 1892 to 30th June 1893.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance...	.....	.....	By 1. Refunds and Drawbacks—Refunds—		
„ VIII. Assessed Taxes—Income Tax—			Divided Heads, Forest	.....	4,316 8 7
Deductions by Government from Salaries and Pensions.	.....	3,665 13 3	„ 11. Forest (as per Summary)	.....	8,10,406 12 2
„ IX. Forest (as per Summary)	.....	13,84,371 6 6	„ 19. Law and Justice—		
„ XII. Interest—			Jails, District Jails, Contingencies	.....	
Interest on Arrears of Revenue	.....	144 2 7	„ Revenue Deposits (Forests)	.....	43,628 7 0
„ XXIII. Stationery and Printing—			„ Cheques and Bills (Forests Cheque cancelled)	.....	5,427 8 6
Stationery Receipts—			„ Advances Recoverable—		
Sale-proceeds of Stationery Boxes	.....		Forest Advances	5,18,357 2 4	
Other Press Receipts—			Tentage Advances	.....	
Government Central Press...	3 14 9		Objection Book Advances	2,689 0 0	
		3 14 9			5,21,046 2 4
„ XXV. Miscellaneous (Provincial)—			„ Cash Recoveries	.....	9,353 6 5
Sale-proceeds of old Stores and Materials	.....	6 7 3			
„ Revenue Deposits (Forest)	.....	79,344 14 1	„ Forest Remittances—		
„ Cheques and Bills (Departmental cheques), Forest	.....	8,37,476 11 11	Remittances to Treasuries	11,78,831 10 2	
„ Advances Recoverable—			Inter-divisional Transfers	15,286 4 0	
Forest Advances	4,95,894 6 5		Inter-departmental Transfers	157 10 10	
Tentage Advances	120 0 0				11,94,275 9 0
Objection Book Advances	3,776 13 5		„ Accounts Current—		
		4,99,791 3 10	„ Account between Bombay and Military, Bombay—		
„ Cash Recoveries	.....	9,353 6 5	IV. Items adjustable by Military	.....	6,000 0 0
„ Forest Remittances to Treasuries—			„ Account between Bombay and Public Works Department, Bombay—		
Remittances to Treasuries	26 0 5		(Ordinary Branches)—		
Inter-divisional Transfers	48,576 6 0		IV. Items adjustable by Public Works Department	.....	2,479 7 8
Inter-departmental Transfers	385 15 10		„ Account between Bombay and Public Works Department—		
		48,988 6 3	(Railway Branch)—		
„ Bombay Uncovenanted Service Family Pension Fund—			Southern Maratha Railway—		
Widows' Branch	.....	437 0 6	IV. Items adjustable by Public Works Department	.....	2,19,789 2 3
„ Account between India and Bombay—			„ Account between Bombay and Marine ..		
III. Items adjustable by India—			Marine IV.—Miscellaneous	.....	47,254 13 5
Bengal Military Fund	.....				
Bengal Military Orphan Fund	.....				
Bengal Uncovenanted Service Family Pension Fund	223 2 6				
		223 2 6			
„ Account between Bombay and Public Works Department, Bombay—					
IV. Payments into Treasuries by Civil Officers on account of Public Works Department...	.....	685 9 8	Closing Balance ...	.....	484 6 2
Total ...	.....	28,64,492 3 6	Total ...	.....	28,64,492 3 6

No. $\frac{F.}{1671}$

Forwarded to the Conservator of Forests, Southern Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

ANNUAL FORM No. 63.

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ANNUAL FORM No. 63

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Revenue received and Outstandings on account of Revenue during 1892-93.

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	REMARKS.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Northern Division of Kánara.	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	1,01,772 8 6	3,13,651 6 6	4,15,423 15 0	3,16,382 8 6	99,041 6 6	
	b. Firewood and charcoal	3 4 0	21,870 0 6	21,873 4 6	20,416 14 7	1,456 5 11	
	c. Bamboos	.....	5 8 0	5 8 0	5 8 0	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	58 5 0	12,048 15 5	12,107 4 5	12,107 4 5	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	181 5 10	21,434 12 4	21,616 2 2	21,434 12 4	181 5 10	
	b. Firewood and charcoal	3,801 8 1	30,473 1 6	34,274 9 7	30,473 1 6	3,801 8 1	
	c. Bamboos	.....	34,687 11 1	34,687 11 1	34,687 11 1	.....	
	d. Grazing and fodder grass ...	.....	13,251 15 9	13,251 15 9	13,251 15 9	.....	
	e. Other minor produce	316 10 8	1,789 8 0	2,106 2 8	2,106 2 8	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	5 12 0	77 0 2	82 12 2	82 12 2	.....	
	Total, Northern Division of Kánara ...	1,06,139 6 1	4,49,289 15 3	5,55,429 5 4	4,50,948 11 0	1,04,480 10 4	
Central Division of Kánara ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	26,574 15 11	81,528 10 4	1,08,103 10 3	83,694 13 8	•24,408 12 7	
	b. Firewood and charcoal	13 9 6	2,076 0 0	2,089 9 6	2,089 9 6	.....	
	c. Bamboos	.....	91 8 0	91 8 0	91 8 0	.....	
	d. Sandalwood	9 8 0	2,839 1 0	2,848 9 0	2,848 9 0	.....	
	e. Grass and other minor produce ...	0 15 9	5,466 6 5	5,467 6 2	5,457 9 2	• 9 13 0	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	2,623 0 5	13,836 7 8	16,459 8 1	13,581 5 9	2,878 2 4	
	b. Firewood and charcoal	16,012 10 10	20,534 8 7	36,547 3 5	25,217 12 8	11,329 6 9	
	c. Bamboos	3 0 0	13,694 14 3	13,697 14 3	13,697 14 3	.....	
	d. Grazing and fodder grass ...	.....	13,047 1 6	13,047 1 6	13,047 1 6	.....	
	e. Other minor produce	480 4 0	6,013 6 0	6,493 10 0	5,690 6 0	803 4 0	

	III.—Drift and Waif Wood and Confiscated Forest Produce	259	1	1	4,740	4	5	4,999	5	6	4,999	5	6	.....	
	Total, Central Division of Kánara ...	45,977	1	6	1,63,868	4	2	2,09,845	5	8	1,70,415	15	0	39,429	6 8
Southern Division of Kánara.	*I.—Timber and other Produce removed from the Forests by Government Agency—*														
	a. Timber	5,485	12	0	28,309	7	8	33,795	3	8	19,640	3	8	14,155	0 0
	b. Firewood and charcoal	.....			999	6	0	999	6	0	999	6	0	.....	
	c. Bamboos	.....			.....			.....			.....			.....	
	d. Sandalwood	.....			6,212	4	0	6,212	4	0	6,212	4	0	.....	
	e. Grass and other minor produce ...	.....			38,844	4	7	38,844	4	7	38,844	4	7	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—														
	a. Timber	736	1	9	14,760	12	10	15,496	14	7	15,485	6	7	11	8 0
	b. Firewood and charcoal	.....			14,776	0	8	14,776	0	8	5,258	8	8	9,517	8 0
	c. Bamboos	.....			1,280	14	6	1,280	14	6	1,280	14	6	.....	
	d. Grazing and fodder grass ...	.....			19,002	6	9	19,002	6	9	19,002	6	9	.....	
	e. Other minor produce	159	6	0	6,780	14	6	6,940	4	6	6,888	8	6	51	12 0
	III—Drift and Waif Wood and Confiscated Forest Produce	.....			386	10	9	386	10	9	386	10	9	.....	
	Total, Southern Division of Kánara ...	6,381	3	9	1,31,353	2	3	1,37,734	6	0	1,13,998	10	0	23,735	12 0
Belgaum Division ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*														
	a. Timber	936	14	10	22,157	13	3	23,094	12	1	22,918	12	1	176	0 0
	b. Firewood and charcoal	.....			2,08,753	14	6	2,08,753	14	6	2,08,753	14	6	.....	
	c. Bamboos	.....			1	3	0	1	3	0	1	3	0	.....	
	d. Sandalwood	.....			290	9	0	290	9	0	290	9	0	.....	
	e. Grass and other minor produce ...	.....			45,412	9	11	45,412	9	11	45,412	9	11	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—														
	a. Timber	.....			2,525	11	2	2,525	11	2	2,525	11	2	.....	
	b. Firewood and charcoal	.....			8,386	6	3	8,386	6	3	8,386	6	3	.....	
	c. Bamboos	.....			8,898	4	2	8,898	4	2	8,898	4	2	.....	
	d. Grazing and fodder grass ...	.....			32,493	4	0	32,493	4	0	32,493	4	0	.....	
	e. Other minor produce	.....			4,733	6	10	4,733	6	10	4,733	6	10	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....			291	0	5	291	0	5	291	0	5	.....	
	V. c. Other sources	.....			6,605	11	0	6,605	11	0	4,305	11	0	2,300	0 0
	Total, Belgaum Division ...	936	14	10	3,40,549	13	6	3,41,486	12	4	3,39,010	12	4	2,476	0 0

ANNUAL FORM No. 63—*continued.*

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Dhárwár Division ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	2,782 0 0	21,261 6 4	24,043 6 4	21,415 2 4	2,628 4 0	
	b. Firewood and charcoal	26 4 0	8,218 14 0	8,245 2 0	8,220 2 0	25 0 0	
	c. Bamboos	.....	.....	.....	.....	... ..	
	d. Sandalwood	.....	8,791 1 2	8,791 1 2	8,791 1 2	.....	
	e. Grass and other minor produce ...	25 0 0	296 7 5	321 7 5	321 7 5	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	.....	815 2 3	815 2 3	815 2 3	.....	
	b. Firewood and charcoal	.....	1,019 15 5	1,019 15 5	1,019 15 5	.....	
	c. Bamboos	.....	6,581 4 6	6,581 4 6	6,581 4 6	.....	
	d. Grazing and fodder grass ...	.....	26,348 0 8	26,348 0 8	26,348 0 8	.....	
	e. Other minor produce	.....	3,199 2 9	3,199 2 9	3,199 2 9	.....	
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	162 6 9	162 6 9	162 6 9	.....	
	Total, Dhárwár Division ...	2,833 4 0	76,693 13 3	79,527 1 3	76,873 13 3	2,653 4 0	
Bijápur Division ...	*I.—Timber and other Produce removed from the Forests by Government Agency—*						
	a. Timber	.....	.....	.....	.....	.....	
	b. Firewood and charcoal	.....	.....	.....	.....	.....	
	c. Bamboos	.....	.....	.....	.....	.....	
	d. Sandalwood	.....	.....	.....	.....	.....	
	e. Grass and other minor produce ...	.....	.....	.....	.....	.....	
	II.—Timber and other Produce removed from the Forests by Consumers or purchasers—						
	a. Timber	.....	520 9 0	520 9 0	520 9 0	.....	
	b. Firewood and charcoal	.....	9,791 2 3	9,791 2 3	9,791 2 3	.....	
	c. Bamboos	.....	10 2 6	10 2 6	10 2 6	.....	
	d. Grazing and fodder grass ...	.....	14,675 11 2	14,675 11 2	14,675 11 2	.....	
	e. Other minor produce	.....	3,489 1 2	3,489 1 2	3,489 1 2	.....	

	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	62 7 0	62 7 0	62 7 0	.....
	Total, Bijápur Division ...	.....	28,549 1 1	28,549 1 1	28,549 1 1	.....
Kolába Division.	*I.—Timber and other Produce removed from the Forests by Government Agency—*					
	a. Timber	.....	1,19,626 13 3	1,19,626 13 3	1,19,023 1 3	603 12 0
	b. Firewood and charcoal	.....	1,338 10 0	1,338 10 0	1,338 10 0	.....
	c. Bamboos	.....	.....	.....	.....	.....
	d. Sandalwood...	.....	.....	.....	.....	.....
	e. Grass and other minor produce ...	.....	0 14 3	0 14 3	0 14 3	.....
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
	a. Timber	4,590 0 0	30,887 1 9	35,477 1 9	34,153 5 9	1,323 12 0
	b. Firewood and charcoal	2,937 8 0	19,661 15 5	22,599 7 5	21,099 7 5	1,500 0 0
	c. Bamboos	.....	.....	.....	.....	.....
	d. Grazing and fodder grass ...	36 4 0	3,040 6 9	3,076 10 9	2,946 14 9	129 12 0
	e. Other minor produce	.....	2,863 4 0	2,863 4 0	1,835 12 0	1,027 8 0
	III.—Drift and Waif Wood and Confiscated Forest Produce	375 0 0	492 0 3	867 0 3	867 0 3	.....
	Total, Kolába Division ...	7,938 12 0	1,77,911 1 8	1,85,849 13 8	1,81,265 1 8	4,584 12 0
Ratnágiri Division	*I.—Timber and other Produce removed from the Forests by Government Agency—*					
	a. Timber	.....	2,316 1 0	2,316 1 0	2,316 1 0	.....
	b. Firewood and charcoal	.....	152 1 0	152 1 0	152 1 0	.....
	c. Bamboos	.....	.....	.....	.....	.....
	d. Sandalwood...	.....	.....	.....	.....	.....
	e. Grass and other minor produce ...	.....	21 0 0	21 0 0	21 0 0	.....
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
	a. Timber	.....	8,494 6 8	8,494 6 8	7,952 3 8	542 3 0
	b. Firewood and charcoal	.....	1,641 2 5	1,641 2 5	1,001 14 1	639 4 4
	c. Bamboos	.....	1 2 0	1 2 0	1 2 0	.....
	d. Grazing and fodder grass ...	.....	334 15 3	334 15 3	334 15 3	.....
	e. Other minor produce	.....	184 0 8	184 0 8	184 0 8	.....
	III.—Drift and Waif Wood and Confiscated Forest Produce	.....	116 12 7	116 12 7	116 12 7	.....
	Total, Ratnágiri Division ...	.....	13,261 9 7	13,261 9 7	12,080 2 3	1,181 7 4

ANNUAL FORM No. 63—*concluded.*

Division.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Total of the Circle ...	*I.—Timber and other Produce removed from the Forest by Government Agency—*						
	a. Timber	1,37,552 3 3	5,88,851 10 4	7,26,403 13 7	5,85,390 10 6	1,41,013 3 1	
	b. Firewood and charcoal	43 1 6	2,43,408 14 0	2,43,451 15 6	2,41,970 9 7	1,481 5 11	
	c. Bamboos	.....	98 3 0	98 3 0	98 3 0	.....	
	d. Sandalwood	9 8 0	18,132 15 2	18,142 7 2	18,142 7 2	.....	
	e. Grass and other minor produce ...	84 4 9	1,02,090 10 0	1,02,174 14 9	1,02,165 1 9	9 13 0	
	II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—						
	a. Timber	8,130 8 0	93,274 15 8	1,01,405 7 8	96,468 8 6	4,936 15 2	
	b. Firewood and charcoal	22,751 10 11	1,06,284 4 6	1,29,035 15 5	1,02,248 4 3	26,787 11 2	
	c. Bamboos	3 0 0	65,154 5 0	65,157 5 0	65,157 5 0	.....	
	d. Grazing and fodder grass ...	36 4 0	1,22,193 13 10	1,22,230 1 10	1,22,100 5 10	129 12 0	
	e. Other minor produce	956 4 8	29,052 11 11	30,009 0 7	28,126 8 7	1,882 8 0	
	III.—Drift and Waif Wood and Confiscated Forests Produce	639 13 1	6,328 10 4	6,968 7 5	6,968 7 5	.....	
	**V. c.* Other sources	.....	11,239 3 7	11,239 3 7	8,939 3 7	2,300 0 0	*As there are no outstandings under *V.c.* in any of the Divisions, except Belgaum, the revenue under this head is not shown in detail against other Divisions.
	Grand Total ...	1,70,206 10 2	13,86,110 5 4	15,56,316 15 6	13,77,775 11 2	1,78,541 4 4	

Note.—The revenue under Budget Heads IV. and V. *a.* and *b.* is Rs. 839-7-4, and Rs. 5,756-4-0, respectively. The total amount realized during the year is Rs. 13,84,371-6-6. (*Vide* Form No. 61.)

Belgaum, 25th September 1893.

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

FORM No. 64.

FOREST DEPARTMENT, BOMBAY, SOUTHERN CIRCLE.

Outstandings and Liabilities on account of Contractors and Disbursers for the Forest year 1892-93, from 1st April 1892 to 30th June 1893.

Division.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.		REMARKS.
	At commencement of year.	Recoveries in Cash and Value of supplies and work done during year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
Contractors.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
North Kánara ...	.....	31,843 5 1	31,843 5 1	1,227 5 1	35,116 0 0	36,343 5 1	4,500 0 0	...	
South Kánara ...	.....	2,000 0 0	2,000 0 0	.....	4,000 0 0	4,000 0 0	2,000 0 0	...	
Central Kánara ...	.....	4,602 10 8	4,602 10 8	5,643 10 11	6,952 0 0	12,595 10 11	7,993 0 3	...	
Dhárwár	.....	1,744 3 0	1,744 3 0	699 8 4	1,100 0 0	1,799 8 4	55 5 4	...	
Kolába	.....	10,834 0 0	10,834 0 0	100 0 0	10,734 0 0	10,834 0 0	.....	...	
Belgaum	.....	57,275 1 7	57,275 1 7	81 5 7	63,718 12 0	63,800 1 7	6,525 0 0	...	
Total, Contractors ...	.....	1,08,299 4 4	1,08,299 4 4	7,751 13 11	1,21,620 12 0	1,29,372 9 11	21,073 5 7	...	
Disbursers.									
North Kánara ...	.....	1,09,747 13 11	1,09,747 13 11	217 10 2	1,11,623 15 9	1,11,841 9 11	2,093 12 0	...	
South Kánara ...	.....	43,579 6 6	43,579 6 6	3,806 7 5	44,585 11 6	48,392 2 11	4,812 12 5	...	
Central Kánara ...	.....	62,224 14 8	62,224 14 8	1,499 9 6	63,438 6 0	64,937 15 6	2,713 0 10	...	
Dhárwár	.....	24,954 13 10	24,954 13 10	.....	25,681 3 3	25,681 3 3	726 5 5	...	
Kolába	.....	72,411 5 1	72,411 5 1	691 5 1	76,023 7 8	76,714 12 9	4,303 7 8	...	
Ratnágiri	.....	11,762 15 1	11,762 15 1	.....	11,938 14 9	11,938 14 9	175 15 8	...	
Belgaum	.....	53,329 1 5	53,329 1 5	1,428 0 0	53,806 11 5	55,234 11 5	1,905 10 0	...	
Bijápur	0 8 0	9,584 11 7	9,585 3 7	.....	9,638 0 0	9,638 0 0	53 4 5	0 8 0	
Total, Disbursers ...	0 8 0	3,87,595 2 1	3,87,595 10 1	7,643 0 2	3,96,736 6 4	4,04,379 6 6	16,784 4 5	0 8 0	
Grand Total ...	0 8 0	4,95,894 6 5	4,95,894 14 5	15,394 14 1	5,18,357 2 4	5,33,752 0 5	37,857 10 0	0 8 0	

No. $\frac{F}{16172}$.

Forwarded to the Conservator of Forests, Southern Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

ANNUAL FORM No. 65.

Forest Department, Bombay, Southern Circle.

Financial results of the year 1892-93.

Division.	Timber and other Produce removed from the Forests by Government Agency.		Other Revenue.		Formation, protection and improvement of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction...	...	...	71	...	37,186	71	37,186	
Northern Division of Kánara	3,48,995	1,54,281	1,03,446	5,793	1,02,180	4,52,441	2,62,254	
Central Division of Kánara	99,181	46,745	72,227	20,505	31,979	1,71,408	99,229	
Southern Division of Kánara	65,793	28,620	49,465	18,959	12,335	1,15,258	59,914	
Belgaum Division ...	2,77,377	1,33,485	61,890	16,363	15,345	3,39,267	1,65,193	
Dhárwár do. ...	38,748	31,020	38,648	9,831	12,163	77,396	53,014	
Bijápur do. ...	...	276	28,938	5,914	13,713	28,938	19,903	
Kolába do. ...	1,20,363	51,299	66,675	17,385	36,215	1,87,038	1,04,899	
Ratnágiri do. ...	2,606	4,439	9,948	4,625	8,486	12,554	17,550	
Total ...	9,53,063	4,50,165	4,31,308	99,375	2,69,602	13,84,371	8,19,142	

J. L. L. MacGREGOR,
Conservator of Forests, Southern Circle.

Belgaum, 25th September 1893.

No. 5643 OF 1893.

REVENUE DEPARTMENT.

Belgaum, 28th December 1893.

Forwarded to Government.

2. This is the first report for the special forest year prescribed in Government Resolution No. 5506 dated the 6th July 1892, and in accordance with the orders given in that Resolution the information furnished in the report relates to the 15 months between April 1, 1892 and June 30, 1893.

Forest area.

3. The changes which have occurred in the forest area of the Southern Circle during the period under report are as follows:—

Area on 1st April 1892.				Total Forest Area.	Added during the year.				Excluded or transferred to other heads.				Area on 30th June 1893.				Total Forest Area.
Reserved.		Protected.			Reserved.		Protected.		Reserved.		Protected.		Reserved.		Protected.		
Sq. m.	Acres.	Sq. m.	Acres.	Sq. m. Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m. Acres.
1,977	12	3,404	258	5,381 270	0	504	1	339	0	128	0	421	1,977	388	3,405	176	5,382 564

The aggregate forest area has therefore practically remained unaltered, the addition being only a few hundred acres, mainly in protected forest.

Work done by the Forest Settlement Officers.

4. Although there are three Forest Settlement Officers now working in the Southern Circle, the subjoined table exhibits the work done by two of them only, as immediately on the appointment of Mr. Sheppard, Mr. Wingate proceeded on furlough and did not return to his duties until the 31st May 1893.

Name of Forest Settlement Officer.	Táluka.	No. of Villages.	Area for which the field work has been completed.	Report submitted or not.
			Sq. m.	
Mr. Sheppard ...	Kárwár ...	7	23·59	No report has yet been submitted.
	Sirsi ...	168	431·28	
Mr. Knight ...	Dhárwár . Gadag ... Karajgi ... Bankápur .	...	111·8	Mr. Knight's report on the Dhárwár Táluka dealing with a forest area of 22 square miles has been disposed of by Government since the date of the report. (Government Resolution No. 7837 of 25th October 1893.)

Mr. Knight's duties as Forest Settlement Officer were on two occasions interrupted, during the period under review, owing to an accident in one instance and to his being employed on special duty in the other, and since the date of the report he has had twice to take up the acting appointment of Collector. The Commissioner trusts that Mr. Knight will now be able to complete his task in respect of forest settlement without being again diverted to other work.

5. Since the close of the year, Government have issued their orders on the forest settlement reports of the Kumta, Khánápur and Dhárwár tálukas. In the Bijápur District some inquiry and settlement work will have to be carried out on the receipt of the orders of Government on the proposals submitted to them with this office No. 4992 dated the 8th ultimo, but it will not require the services of a special Forest Settlement Officer.

6. The work that remains to be done either in regard to old forest areas notified under Section 34 of the Forest Act or to the conversion of Protected into Reserved Forest is given below:—

	Sq.m.	Acres.
Kánara	2,004	22
Kolába	11	353
Dhárwár...	266	286

Excluding the charges on account of the salaries and allowances of the Forest Settlement Officers, the cost per square mile of settlements effected during the year under report was Rs. 66·3. The Conservator of Forests, S. C., has not furnished any explanation of the great variation between this sum and the average cost of settlement up to date, which amounts to Rs. 133·6 per square mile.

7. The papers regarding the settlement of the betta lands to which the Conservator of Forests, S. C., has made a reference in paragraph 37 of his report, were returned for reconsideration and further report to the Collector of Kánara, who has promised to submit his reply on the whole question immediately after the Christmas holidays.

Demarcation.

8. The work accomplished by the demarcation establishment employed under the Forest Settlement Officer in Kánara is described in paragraphs 38 to 41 of the Conservator's report. The report does not state what was the strength of this establishment and how the quantity of work done in the year compares with that done in the previous year, and, lastly, whether the outturn of the work in the year under report was adequate.

Work done by the Topographical Survey.

9. The figures given in paragraphs 43 and 44 do not tally with those shown in Form No. 49, probably for the reason that the latter refer to the period from 1st October 1892 to 30th September 1893 (*vide* remark in the last column of Form 49). The cost per square mile of completed area in Kánara on a scale of 4 inches to one mile was Rs. 85. In Kolába the average cost per square mile of the area surveyed is stated to have been Rs. 205 against Rs. 112 in 1891-92. The falling off in the results of 1892-93 is attributed partly to sickness amongst the surveying establishment and partly to the absence of supervision over detail work owing to the deputation of the supervising officer on triangulation work in Kánara. The topographical survey was commenced in 1886. The area surveyed since that year is approximately 1,442 square miles, leaving an area of 3,940 square miles still to be surveyed. Mr. MacGregor estimates that the establishment at its present strength will take thirteen years to complete the work yet remaining to be done in the Southern Circle, and that the cost will be about four lákhs of rupees.

Chapter II.

10. The following table shows the progress made during the year in the preparation of working plans:—

Total Forest Area.	Areas for which Working Plans have already been completed.	Areas for which Working Plans were taken in hand during the year.	Areas for which Working Plans have still to be taken in hand.
Sq. m.	Sq. m.	Sq. m.	Sq. m.
1,189	122	83	984

Except in respect of the forest areas of Khálápur and Karjat, for which the working plans were prepared before their transfer to the Southern Circle, no working plans are yet ready for any other part of the Reserved Forest in the Southern Circle. The total area for which data for the preparation of working plans were collected during the year was 20,100·3 acres and the total cost incurred amounted to Rs. 33,991, the average cost per acre being Rs. 1-11-$\frac{1}{2}$. The average cost per acre of working plans hitherto completed is given in the remarks column of Form No. 50 as 12$\frac{5}{6}$ annas.

Communications and buildings.

11. No works of any great importance were executed during the year. The total outlay on communications amounted to Rs. 2,353 and on buildings to Rs. 6,268.

Prosecutions for breaches of the Forest Act and rules.

12. The total number of cases taken into Court during the year was 589 against 249 in 1891-92. In addition to the reasons assigned in paragraphs 71 to 81 for the large increase in the number of cases thus dealt with, it may be noticed that the figures for 1892-93 are for 15 months and not for 12 months. The only division in which the number of prosecutions for breaches of the Forest Act and rules has decreased is the Central Division of Kánara. In all other divisions there is a greater or less increase. The rise in the Belgaum District is nearly 300 per cent., and is attributed to illicit grazing in the Khánápur and Gokák ranges, the offenders mostly belonging to the class of professional graziers. A material increase is also noticeable in the Northern and Southern Divisions of Kánara. In the former, of the 119 cases, 101 arose from the illicit removal of firewood from the closed area within a radius of five miles from Kárwár. In the Southern Division the increase of 83 cases was caused by the illicit removal of 'soppu' (green leaves, &c.) for manure. The increase may be regrettable, but for it the offenders are solely to blame. When cautions, reprimands and minor penalties prove ineffectual, and rules and orders are systematically disregarded, as appears to have been the case in parts of Belgaum and Kánara, the Forest Officers have no option left to them, if conservancy is to be real and not a farce, but to resort to more severe measures and to prosecute the guilty parties in the Criminal Courts.

13. The total number of forest offences committed was 1,498 as contrasted with 1,052 in the preceding year, displaying a material increase. Of these offences 909 cases were compounded, and the remainder (589) were, as already stated, taken into Court. In the Northern and Southern Divisions of Kánara the number of cases taken into Court considerably exceeds the corresponding figures of the previous year. On the other hand, the number of cases compounded in Belgaum is more than double that in the preceding year.

14. The subjoined table shows how the offences were dealt with :—

CASES OF THE YEAR 1892-93.

Pending in Court on 1st April 1892.	Taken into Court during the year.	Total.	Disposed of by Magistrates during the year.			Pending in Court on 30th June 1893.	Percentage of failures.		REMARKS.
			Convictions.	Acquittals.	Total.		1891-92.	1892-93.	
8	589	*597	438	137	575	12	22	24	* 10 cases were withdrawn, as the accused died.

In Bijápur, where forests exist mainly only in name, the breaches of the law were naturally few, and in 14 of the 15 cases the offenders were successfully prosecuted. In the Southern Division of Kánara and Belgaum, however, the failures were comparatively small. In the Northern Division of Kánara, 45 cases were dismissed by the Magistrate on the ground that they were "first offences," and this fact must be taken as an explanation of the comparatively large percentage of failures.

Cases dealt with under Section 67 of the Act.

15. The table printed at paragraph 83 of Mr. MacGregor's report gives the necessary information regarding the number of cases dealt with under Section 67 of the Forest Act. The increase occurred in the districts of Belgaum and Bijápur and the Northern Division of Kánara, that in Belgaum being most marked. The Divisional Forest Officer attributes it to greater activity on the part of the protective establishment. The opinion, if any, expressed by the Collector on the subject does not appear in the report, but a rise in the number

of cases from 210 to 475 is certainly one which the Collector of the district was bound to explain in forwarding the report of the Divisional Forest Officer. The Commissioner, however, would remark that, as far as he is able to judge, Mr. Murray is not an officer who can fairly be accused of undue harshness to the villagers, and that his action in dealing with them is characterised by much moderation and by full consideration of their reasonable wants and claims.

As regards the increase of 34 cases in Bijápur, Mr. Monteath remarks that there is no ground for complaint with regard either to the institution of prosecutions or the working of Section 67 of the Act.

Protection from fire.

16. The subjoined table exhibits the results of the measures adopted for the protection of forests from fire:—

Year.	Area in Square Miles.			Proportion of failures to Area attempted.	Cost per Square Mile protected.	Percentage of area under fire protection to total area of Reserves.
	Attempted.	Failures.	Protected.			
					Rs.	
1892-93, *i. e.* from April 1, 1892 to 30th June 1893.	1,238	19	1,219	1·53	19·34	62·6
1891-92	1,016	25	1,021	2·39	16·14	53·2
	+192	—6	+198	—·86	+3·20	+9·4

There is a satisfactory increase in the area under protection from fire, and the attempts of the Forest Department were attended with success to a great extent, in as much as the area actually protected has increased from 1,021 to 1,219 square miles. The cost per square mile of protected area has simultaneously risen from 16·14 to 19·34 rupees.

There was an increase of 192 square miles in the area attempted, coupled with a decrease in failures from 25 to 19 in 1892-93. The results of the measures adopted in the districts of Belgaum, Kolába and Ratnágiri are described by the Conservator of Forests as very satisfactory. As might be expected, in many cases of fires in the three divisions of Kánara and in Dhárwár the offenders could not be discovered.

Cattle impounded.

17. The number of cattle impounded was 6,765 against 8,726 in the preceding year, the decrease occurring mainly in Dhárwár and Bijápur, where no cattle were impounded.

Grazing.

18. Two sets of rules for the regulation of grazing obtain in the Southern Circle; one applies exclusively to Kánara and the other to the remaining five districts. Owing to the introduction of the new fee system the revenue accruing from grazing has increased from Rs. 91,487 in 1891-92 to Rs. 1,07,944 in 1892-93. The Conservator complains that the condition of the sparsely covered rocky hills of Bijápur cannot be improved without enforcing strict closure periodically, and in this opinion the Commissioner concurs after seeing a considerable area of the scrub jungle called forest in Bijápur.

Minor produce.

19. The receipts from minor-products decreased from Rs. 1,65,012 in 1891-92 to Rs. 1,30,292 in 1892-93, owing to the very poor outturn of hirdas (myrabolams), which is the principal article of minor produce in Kánara and Belgaum. The quantity of hirdas collected during the period under report was only 97,058 khandis as compared with 1,35,729 khandis during the previous year.

Chapter III.

20. The following table extracted from Form No. 57 compares the outturn of timber and fuel during the year 1892-93 with that during the year 1891-92:—

Description of Timber.	Year.	Quantity.
I.—Timber in the rough logs ...	1892-93 ...	Cubic feet 326,364.
	1891-92 ...	Do. 309,974.
II.—Timber in the rough poles ...	1892-93 ...	Do. 850,204.
	1891-92 ...	Do. 891,643.
III.—Sawn or square timber ...	1892-93 ...	Do. 416,433.
	1891-92 ...	Do. 314,093.
IV.—Miscellaneous	1892-93 ...	Do. 81,876.
	1891-92 ...	Do. 161,340.
V.—Fuel	1892-93 ...	Do. 5,499,725.
	1891-92 ...	Do. 6,243,815.
VI.—Sandalwood	1892-93 ...	Khandis 76-0-21.
	1891-92 ...	Do. 55-14-17½.
VII.— Do.	1892-93 ...	Pieces 53.
	1891-92 ...	Do. 964.
VIII.— Do.	1892-93 ...	Trees 131.
	1891-92 ...	Do. 139.
IX.—Bamboos	1892-93 ...	No. 5,642,833.
	1891-92 ...	Do. 4,031,476.
X.— Do.	1892-93 ...	On contract No. 100,000.
	1891-92 ...	Do. *Nil.*

Under the heads Nos. II, IV and V a marked and serious falling off is noticeable. It appears from the summary given by the Conservator that the yield of large teak shows a decrease in all the three divisions of Kánara and in Dhárwár. The reasons assigned for such a result are agricultural distress, stagnation of trade and the competition of Burma teak. Thus the effects of the year of distress were still felt during the year under report, but better results may be expected during the current year.

Chapter IV.

21. The following table gives side by side the receipts and charges for the financial year 1892-93 and those for the year 1891-92 :—

Year.	Revenue.	Expenditure.	Surplus or net Revenue.
	Rs.	Rs.	Rs.
1892-93	12,01,085	6,74,597	5,26,488
1891-92	11,47,707	7,05,231	4,42,476
			84,012

There is thus a net increase of Rs. 84,012 in the surplus revenue of the year over that of the previous year. On the whole the financial results of the Southern Circle are very satisfactory, showing, as they do, a decrease in the expenditure and at the same time an increase in the gross revenue.

Chapter V.

Forest Administration.

22. The remarks and proposals contained in paragraphs 230 and 235 seem to be out of place in a report on the administration of the Department, and the Commissioner must express his dissent from the suggestion made in paragraph 235. The officers of the Forest Department in the Southern Circle from the Conservator downwards are most certainly not overworked, and the charge of the Conservator is not so wide, nor are his duties so heavy, that any curtailment of the Circle is desirable or necessary.

There is at present no remedy for the complaint made in paragraph 234 regarding the absence of village records in villages in the Ratnágiri District. There is no Government village agency in that district except in the tálukas of Vengurla and Málvan and in some of the villages in the northern tálukas, and under the law as it stands at present, the khots cannot be compelled to keep the several village forms.

23. During the period under report the forest administration of the Circle has been efficiently conducted by the Conservator and the various Divisional Forest Officers, with one exception, whose relations with the Land Revenue Department officials have been happily most amicable.

J. NUGENT,
Commissioner, S.D.

SIND CIRCLE.

No. 2123 of 1893-94.

From

THE DEPUTY CONSERVATOR OF FORESTS, SIND CIRCLE.

To

THE SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,
BOMBAY.

Deputy Conservator's Office,
Karachi, 12th October 1893.

SIR,

I have the honour to submit herewith the annual Administration Report of the Sind Forests Circle for the year 1892-93, with its subsidiary statements. Forms Nos. 54 and 55 will follow shortly.

I have the honour to be,
Sir,
Your most obedient Servant,
W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

Submitted through the Commissioner in Sind.

Annual Administration Report of the Sind Forest Circle for the year 1892-93.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

Alteration of area.

The subjoined table gives the area of the forests of the Sind Circle as they appeared on the records of the Deputy Conservator's office on the 30th June 1893, together with the additions thereto and deductions therefrom during the period—15 months—under report.

Name of Division.	Area, as it stood on 31st March 1892.				Area added during the year.				Area excluded during the year.				Area as it stood on 30th June 1893.			
	Reserved.		Protected.		Reserved.		Protected.		Reserved.		Protected.		Reserved.		Protected.	
	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.
Sukkur	446	79	1	128	...	7	...	...	...	...	...	...	446	86	1	128
Naushahro	229	90	3	427	...	...	...	...	...	95	...	...	228	635	3	427
Hyderabad	159	594	...	...	...	...	...	...	...	97	...	...	159	497	...	...
Jerruck	151	477	...	117	...	...	...	...	11	366	...	...	140	111	...	117
Total ...	936	600	5	32	...	7	...	...	11	558	...	...	975	49	5	32

In the above table 3 square miles and 427 acres appear for the first time in the Naushahro Division. This area is in the Shahghardhandan Forest in the Sehwan Taluka, but through an oversight has been omitted from former reports. In the Sukkur Division 6 acres and 36 guntas in the Ghotki Taluka were added to the Adilpur Forest, *vide* Government Resolution No. 3432, dated the 12th May 1893.

Of the areas excluded during the year under report, 95 acres from the Gajidero Forest were transferred to the Public Works Department for a new feeder to the Western Nara Canal, *vide* the Commissioner's order No. 2238, dated the 14th June 1893.

In the Hyderabad Division about 97 acres have been disforested, all from Shahmakai Forest; 93 acres and 23 guntas were handed over to Mir Ghulam Hussein in exchange for land taken up in past years for the Hyderabad Farm and Economic Garden; a small area of 2 acres and 38 guntas was transferred to Mir Nur Mahomed in exchange for land belonging to him, taken up for the Hyderabad-Umarkot Railway, and 33 guntas were granted to the Borah community of Hyderabad for a burial ground.

In the Jerruck Division the whole of the Laikpur Forest, 7,406 acres in area, was disforested and handed over to the Revenue Department, the forest being unirrigated and consequently unproductive.

2. The area then of the Sind Forests on the 30th June of the year under report was 11 square miles 551 acres less than it was on the 31st March 1892. It is to be hoped that with the assistance of the Forest Settlement and Demarcation Officer, it will be possible to report that large additions to our forest area have been made during the coming year.

Action of the river.

3. The following statement shows approximately the action of the river on the forest frontage during the period under report:—

Division.	Area lost. Acres.	Area gained. Acres.	Amount spent in clearing eroding banks. Rs.	Amount realized by sale of erosion timber. Rs.	Value of material in hand. Rs.	Remarks.
Sukkur	2,634 0	535 0	1,064 2 1	2,403 8 0	2,359 12 3	
Naushahro	1,505 0	1,100 0	493 4 0	804 0 0	24 9 0	
Hyderabad	1,835 0	880 0	85 0 0	223 0 0	.....	
Jerruck	3,053 0	4,146 0	.....	.....	.....	
Total ...	9,027 0	6,661 0	1,642 6 1	3,430 8 0	2,384 5 3	

Relative value of losses and gains.

4. It will be seen that the area lost during the period under report was 2,366 acres in excess of the area gained. It is, however, necessary to point out that while the estimate of the area lost is correct or very nearly so, as may be calculated from the forest map the same remark by no means applies to the area gained, which, except in the case of the Jerruck Division where the area was measured by a surveyor and tested by the Divisional Forest Officer, is generally guessed at by the Range Forest Officers called upon for a report. In order, however, to fully estimate the relative value of the losses and gains, it must be borne in mind that the areas gained are mere mud—banks—kachas which may or may not be washed away, and which, even should they remain as permanent accretions, may not be handed over to my Department. The gains, therefore, represent nothing tangible, certainly nothing that can be made use of for years, while the losses generally consist of good forest, fit perhaps for the axe. In the Sukkur Division, the area lost was one of our valuable Upper Sind forests; in it was an old established garden called the Aliwahan Garden, and a large Sisso plantation. Both have disappeared; the only consolation being that a large portion of the blackwood from the Sisso plantation was saved and sold in the Sukkur Depôt. The value of the land lost in the Hyderabad Division may be estimated from the following extract from the Divisional Forest Officer's Administration Report. "The area lost by erosion is very large, as the large kacha thrown up last year in front of the Unarpur Belo was again taken away by the river with some valuable babul forest. The land taken away in the Rano Range was all valuable kandi, bahan and babul forest. In the Miani Range the land washed away by the river was all sandy land, with the exception of a small piece in the Jakhri belo, which was valuable babul forest. The area gained is all sandy. The area washed away from the Keti Mahrani was all valuable babul and bahan forest." Our loss, then, is, as a rule, good forest; and our gain either mud or sandy accretions.

5. It will be seen that the amount spent in saving wood from threatened banks was Rs. 1,642-6-1, the amount realised by the sale of timber saved was Rs. 2,430-8-0, while the value of the material remaining unsold is estimated to be Rs. 2,384-5-3.

The appointment of a special Forest Settlement and Demarcation Officer.

6. As pointed out in last year's report the sustained yield of the forests, including the Revenue jungles, is not sufficient to meet the increasing demands of the Province, and it has been found necessary to appoint a special Forest Settlement and Demarcation Officer for acquiring additional forest areas. The annual report of this officer has probably reached Government through the Commissioner in Sind, and therefore everything connected with forest settlement and demarcation which is usually incorporated in the Forest Administration Report will on this occasion be omitted. I may, however, mention that, as the Forest Settlement and Demarcation Officer was appointed very late in the year, he has, of course, not been able to accomplish much more than hurry through some of the districts, examining land on the banks of the river suitable and available for forest purposes. I would suggest that in future Government should direct that the Forest Settlement and Demarcation Officer's report be submitted through the Deputy Conservator.

7. The year's experience again shows the great necessity for a larger area. The revenue jungles, especially in Upper and Central Sind, which have hitherto contributed to the supply of the Province, are fast failing. The Divisional Forest Officer, Sukkur, in his Administration Report says: "The approximate area of the riverain and watered forests is 1,90,000 acres; of this about 1,10,000 acres only are productive. The ascertained average yield per acre is 140 cubic feet. The yearly demand is over 50,00,000 cubic feet. A simple arithmetical calculation shows that the required area to ensure a sustained yield equal to the demand is, at this rate, 4,20,000 acres." Although I do not agree with the Divisional Forest Officer in his estimate of the average yield per acre, yet I must acknowledge that in many parts of the Division it is very small. The improved system of working, however, will soon improve the yield of the Division, and if we can tide over the period until the compartments now closed for reproduction can be again exploited, I hope, with additional forest areas, to be able to ensure the supply in the Sukkur Division. The Divisional Forest Officer goes on to observe that "this year the forest yield was supplemented by wood from the revenue jungles, but this cannot continue for more than a year; in fact, had this year's indent been fully met, the revenue jungles would have been completely cleared of all growth, so that in the ensuing year not more than 25,00,000 cubic feet of fuel can under the working plan be obtained from the forests alone." Such is the prospect in the Sukkur Division; in the Naushahro Division it is even worse; add to this the constantly increasing demands made upon the forests, and it will be seen that additional areas for forest purposes is a matter of imperative necessity.

Necessity for a much larger area: revenue jungles of Upper and Central Sind fast failing.

8. The lands which have been selected for reservation and notified under Section 4, but the forest settlement of which has not yet been completed, are given below. They are the same as last year, except Butho in the Manjhand Taluka, which was selected by the Divisional Forest Officer, Hyderabad, during the period under report. The papers connected with the whole of these areas have been placed in the hands of the Forest Settlement and Demarcation Officer, who, it is hoped, will speedily dispose of them.

Lands selected for reservation.

Name of Forest.	Taluka.	Area in acres.	Year in which notified.
Khairwah	Jacobabad	56 30	1886.
Gokalpur		64 30	
Adilpur	Ghotki	1,074 1	1890.
Tarai	Naushahro Abro ...	2,349 5	1887.
Chango Rahuja		1,749 35	
Choi...		3,132 20	
Adamji		4,352 25	
Phohyari		743 4	
Masti Khan		225 0	
Katcha Khanote	Hala	2,880 0	1890.
Butho or Katcha Lakha	Manjhand	579 0	1892.

9. Special attention has been paid to the keeping in order of the boundary paths, compartment lines and boundary marks, and for the most part the work has been satisfactorily done.

Boundary paths, &c.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—Regulation of Management.

10. The working plan described in last year's report was carried out in all parts of the Circle, but in some of the Divisions under great difficulty. To work according to a fixed plan of operations was neither popular with wood-cutters nor forest

The working plan.

subordinates; and it was only owing to the great exertions made by the Divisional Forest officers that I have been able to carry out my plans. In the Hyderabad Division, of which I formerly held charge, and into which I introduced years ago the working plan now in operation throughout the Circle, little difficulty was experienced, as the following remarks from the Divisional Forest Officer show: "The rough working plan adopted in the forests of this Division, though in force for some years, was carried out this year more satisfactorily than in former years. The work of cutting and supplying loco. fuel being done departmentally from the 1st October 1892; the compartments given out for cutting up to the end of March 1893 were cleared thoroughly and only standard trees were allowed to remain." This is very satisfactory; but in the other Divisions of the Circle it has been no easy task. The Divisional Forest Officer, Jerruck, writes: "This is the first time that any attempt at adhering to a system of working the forests was made, and it must be said that the endeavour to give effect to orders, and at the same time to cope with the indents placed on the Division, was not an easy matter. Of course the working plan ought to have been in full force when I took over charge of the Division, and believing it to be so, I issued no order on the subject; but I found on going round the Division, that the system had to be started, and the whole of the details dinned into the men. One forester, who had been in Upper Sind, and who had been fully instructed in the principles of the working plan, threw it all to the winds when he came to the Jerruck Division and conducted his duties just as if no orders had been issued on the subject at all. With such men to work with, it is no wonder that orders were not carried out. The older foresters do not like the new system, as they cannot fall in with it. The Poona College students are much the best for the work, although at first they might lack practical training and experience."

The Divisional Forest Officer, Naushahro, has not been without his troubles also, for he writes: In introducing the departmental cutting considerable difficulties were met with from the wood-cutters. Those who previously had been accustomed to cut wherever they could do so most conveniently to themselves, were now unwilling to be restricted to the compartments allowed them, and stood out for very high rates, and it is to be feared that in doing so, they were rather encouraged than otherwise by some of the Range Forest Officers."

The Divisional Forest Officer, Sukkur, writing on the same subject, says: "The first attempt to work systematically in this Division was made last year (1891-92), but as it was not sufficiently understood by the subordinates, nor respected by the contractors; in spite of all efforts and endeavours of Mr. Ryan, the introduction of the scheme, its execution, and rigid enforcement, cannot be said to have been satisfactory. Nevertheless, it was a great advance upon the old system, when the contractor was allowed to cut indiscriminately wherever he chose, thus making it hard to tell whether the forests were being overworked or underworked or depleted, as this being gradual and imperceptible, can be discovered after the lapse of a long time only when the damage is done, as bitter experience of last year, and the introduction of departmental felling, made it possible this year to adhere to the working plan more successfully, and a decided improvement is noticeable."

From these extracts it will be seen that a good start has at last been made; and when forest subordinates have been made to understand what strict enclosure and good fencing really mean, a great advance will have been made towards improving the fuel supply of the Province. In the Hyderabad Division, where the working plan has been in operation for some years, the yield per acre is far in excess of any of the other Divisions. Close cutting, good clearing, strict enclosure and the good fencing of all compartments exploited will be the four things aimed at in all Divisions, and the example I have had to make of several forest-guards and sub-rangers, who have neglected to carry out orders on these subjects, cannot fail, I feel sure, to have a good effect on the forest subordinates of the Circle.

Cutting and cost of compartment lines.

11. The following statements show the progress made in the work of cutting of the forests into compartments. It is to be hoped that, by the end of the approaching working season, the work will be nearly completed throughout the Circle, so that when the areas about to be acquired by the Department are handed over, they may be at once taken in hand and treated in the same way.

Division.	No. of miles.	Total cost.	REMARKS.
Sukkur	107	798 0 0	
Naushahro	2	15 12 0	
Hyderabad	1⅛	13 11 0	
Jerruck	25	381 12 4	
Total ...	135⅛	1,209 3 4	

Division.	Area cut up into compartments up to March 1892.		Area cut up during 1892-93.		Total area cut up into compartments.		Area still remaining to be cut up.
	Acres.	Length in miles of rides of 20 feet wide.	Acres.	Length in miles 20 feet wide.	Acres.	Length in miles 20 feet width.	Acres.
Sukkur...	1,95,995	1,224	4,829	30	2,00,824	1,254	83,102
Naushahro	82,764	516	320	2	83,084	518	56,378
Hyderabad	96,547	490	90	1	96,607	491	5,747
Jerruck	89,453	508	4,020	25	93,473	533	3,621
Total ...	4,64,729	2,738	9,259	58	4,73,988	2,796	1,58,848

II.—WORKING OF THE YEAR.

General Protection and Breaches of Forest Law.

Cases tried by Magistrates.

12. The following statement shows the number of cases tried by Magistrates during the year ending 31st March 1892, and for the 15 months ending the 30th June 1893, and although the number of cases is slightly in excess of that of last year, yet when the extent of the area, and the number of the population of the districts in which the forests are situated, are taken into account, both the number of cases tried by Magistrates, and the offences compounded cannot be said to be in any way excessive:—

Divisions.	Number of cases taken before Magistrates.		Number of convictions.	
	1891-92.	1892-93.	1891-92.	1892-93.
Sukkur	11	18	3	7
Naushahro	13	13	9	7
Hyderabad	9	15	8	10
Jerruck	2	4	1	1
Total ...	35	50	21	25

Cases compounded under Section 67.

13. The number of cases compounded under Section 67 of the Indian Forest Act is given in the following table, and it should be remembered that the figures given

in the second column of each sub-head are for 15 months. It will be observed that illicit grazing is the chief offence. This ought not really to be classed as a compounded offence, as such offences are dealt with under the grazing rules sanctioned by the Commissioner in Sind. A person found grazing his cattle without a pass, is fined one month's grazing-fees, and he is obliged to take out a pass for two months' grazing, *i. e.*, he gets two months' grazing for three months' grazing fees. Other offences were not numerous, but if not noticed, would simply mean that the forest subordinates had not done their duty :—

Divisions.	Illicit grazing.		Theft.		Other offences.		Compensation.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Sukkur	1,276	1,199	194	175	1	1	1,602	1,637
Naushahro	175	163	40	35	22	19	238	263
Hyderabad	483	243	162	101	...	...	1,054	632
Jerruck	377	456	16	34	6	1	524	553
Total ...	2,311	2,061	412	345	29	21	3,418	3,085

Disinclination of Divisional Forest Officers to prosecute offenders.

14. The Deputy Conservator regrets to report that the remarks made by the Commissioner in Sind in para. 6 of his review of last year's report have been misunderstood, and have caused Divisional Forest Officers to refrain from instituting proceedings, where proceedings were necessary. In one instance a Divisional Forest Officer refused to prosecute in a case, and when called upon for an explanation, wrote: "I have no desire to be harsh in administrating the law, and I hoped it would be understood that, in declining to prosecute in the case under reference, I was endeavouring to carry out the Commissioner's wishes." This, of course, could not be allowed, and the Deputy Conservator was compelled to write to the Divisional Forest Officer as follows: "I am afraid you are allowing the Commissioner's remarks in para. 6 of his review of the last Administration Report to influence you more than they are intended to do as regards the prosecution for forest offences in your Division. The Commissioner never intended that serious forest offences should remain unpunished. He simply wished to caution forest officers against any undue severity, and to impress upon them the necessity of acting in a kindly and forbearing spirit to those living on the borders of the forests—nothing more. It is scarcely necessary for me to point out to you that should it become known that you decline to take action against offenders, offences will increase to the detriment of the forest, and the demoralisation of those serving under you. The disinclination you appear to manifest to support those of your subordinates who have actually been assaulted, will have a tendency either to prevent them, through fear, doing their duty, or it will cause them to combine with the people and take compensation from offenders for their own benefit. In the case referred to in the letter under reply you are requested to prosecute the offenders."

Compensation paid under Section 67.

15. The amount accepted as compensation up to Re. 1 and upwards, in the cases compounded under Section 67 of the Indian Forest Act, is given in the following statement:—

Districts.	Names of Divisions.	Fines inflicted.	
		No. of cases.	Amount.
Upper Sind Frontier.....	Sukkur	27	Up to Re. 1
		3	„ Rs. 2
		1	„ „ 5
	Total ...	31	

Districts.	Names of Divisions.	Fines inflicted.	
		No. of cases.	Amount.
Shikarpur	Sukkur	1,168	Up to Re. 1
		92	„ Rs. 2
		30	„ „ 3
		16	„ „ 4
		13	„ „ 5
		7	„ „ 6
		2	„ „ 7
		5	„ „ 8
		5	„ „ 9
		1	„ „ 14
		2	„ „ 17
		1	„ „ 19
		1	„ „ 24
		1	„ „ 25
	Naushahro	66	„ Re. 1
		12	„ Rs. 2
		5	„ „ 5
		4	„ „ 4
		1	„ „ 13
		1	„ „ 40
	Total Shikarpur District...	1,433	
Hyderabad	Naushahro	61	Up to Re. 1
		27	„ Rs. 2
		11	„ „ 3
		2	„ „ 4
		1	„ „ 5
		1	„ „ 7
	Hyderabad	153	„ Re. 1
		89	„ Rs. 2
		14	„ „ 3
		11	„ „ 4
		18	„ „ 5
		7	„ „ 6
		3	„ „ 8
		2	„ „ 10
		1	„ „ 16
		1	„ „ 26
	Jerruck	12	„ Re. 1
		4	„ Rs. 2
		2	„ „ 3
		1	„ „ 4
		1	„ „ 6
	Total Hyderabad District...	422	
Karachi	Naushahro	19	Up to Re. 1
		6	„ Rs. 2
	Hyderabad	20	„ Re. 1
		11	„ Rs. 2
		4	„ „ 3
		7	„ „ 5
		1	„ „ 7
		1	„ „ 8
		1	„ „ 20
	Jerruck	291	„ „ 1
		124	„ „ 2
		31	„ „ 3
		19	„ „ 4
		3	„ „ 5
		2	„ „ 6
		1	„ „ 9
	Total Karachi District...	541	
	Grand Total...	2,427	

Number of cattle impounded.

16. The number of cattle impounded for grazing in open and closed forests for the 15 months under report was as follows:—

Names of Divisions.	Number of cattle impounded in		Total.
	Open forests.	Closed forests.	
Sukkur	5,681	2,324	8,005
Naushahro	2,395	4,515	6,910
Hyderabad	699	7,351	8,050
Jerruck	1,094	1,798	2,892
Total ...	9,869	15,988	25,857

Fires: fewer in number.

17. The following table shows the area burnt during the period under report. It is satisfactory to report that there were fewer fires in the Sind Circle, and that they were less destructive than formerly:—

Names of Divisions.	Number of fires.		Area burnt.	
	Financial year 1891-92.	Forest year 1892-93.	Financial year 1891-92.	Forest year 1892-93.
Sukkur	85	38	3,539	1,273
Naushahro	3	6	6	282
Hyderabad	7	2	580	90
Jerruck	12	7	1,414	594
Total ...	107	53	5,539	2,239

Improvement of Forest Growth.

Natural re-production.

18. The period under report has been a good one, both as regards the rainfall and the height of the inundation, and it is gratifying to be able to report that some of our high-lying forests, not usually flooded, received a watering. There is usually enough seed in the soil of the Sind forests to ensure reproduction if there is sufficient water to make the seed germinate and the young seedlings are strictly protected from grazing. Of course, while the forests are under water, they are naturally closed; but in order to ensure the safety of the young growth in some of the forests of the Hyderabad Division, the Deputy Conservator sanctioned the closing of a certain number of forests to grazing of all kinds until the fences had been properly constructed and repaired. This was done prior to the inundation, and the Divisional Forest Officer was enabled, on the subsidence of the river to select certain areas for enclosure before cattle were allowed to run over them, and the result, as regards the young growth, was most satisfactory. This was no hardship to the cattle, as there was plenty of the stubble of the kharif crop for them to feed upon; but as it involved a slight loss of revenue to Government, it is a practice which will not be generally adopted.

19. It was pointed out in last year's report that the construction of bunds had in some parts of the Province completely altered the character of the country; that they kept out the floods which once watered plains, the result being dried up forests, and the complete destruction of what were once excellent grazing grounds; and a map showing the forests which had been rendered unproductive was prepared and forwarded with the Administration Report. There can be no doubt that the bunds prevent a vast amount of natural re-production, and have rendered many of the once well-wooded areas quite useless for forest purposes. Take the country from Kashmor to Shewan on the right bank of the river, nearly the whole of this portion of Sind is cut off from the floods, the result being that the jungles are fast drying up, and unless some change takes place, there will soon be a scarcity of fuel even for domestic purposes. It must be recorded that in the Jerruck Division certain of the forests hitherto deprived of water, and rendered unproductive, received an unexpected supply of water. The bunds, unable to withstand the force of the water, were breached in several places to the great benefit, it is to be hoped, of some of our drying-up Lower Sind forests.

Natural re-production checked owing to the construction of bunds.

Exploitation of Major Forest Produce.

20. In the clearing of compartments selected for exploitation under the working plan, the object aimed at is the utilisation of all available material. The mature timber is cut and either conveyed to the various depôts for sale, or converted into bolsters and sleepers supplied to the North-Western Railway; slabs and props sent to the Khost Colliery in Baluchistan, and beams for the Gun Carriage Factory, Bombay. All fuel suitable for locomotive purposes is conveyed to the various railway stations for use on the North-Western Railway; the fuel, too thick for locomotive purposes, is disposed of for export to Bombay, Karachi, and the ports along the coast, and for the Commissariat Department, Quetta; the thin fuel is sent to the depôts for sale as firewood; while the crooked and useless timber is converted into charcoal.

Utilisation of all material found in compartments selected for exploitation.

Extraction and transport of Forest Produce by land and water.

21. The cost of carriage of the produce of the forests of the Circle is a matter of great importance, and one to which the Deputy Conservator has given considerable attention during the past year. Some of the forests are so remote from the railway, that it is impossible to utilise either the timber or locomotive fuel found within them—the cost of carriage being prohibitive. About two lakhs of rupees are spent annually on the conveyance of locomotive fuel alone, the means of trasnport being by donkey, camel, bullock-cart and boat. The Deputy Conservator has had under consideration a scheme for providing a portable tramway for use in those forests within six or seven miles of the railway, but has found that the cost would be far greater than the present method of transport.

Utilisation of Forest Produce sometimes impossible owing to the cost of carriage.

22. When difficulties occurred during the year in getting wood cutters, who both cut the fuel and carry it to the banks of the river, to work at the rate offered by the department, the Deputy Conservator had drawings and estimates prepared for "conveyors," but found that they could not well be used beyond two or three miles from the banks of the river, and the idea of introducing them had to be abandoned. A few years hence and steam in some shape or other will have to be resorted to, for the cost of labour and carriage is every year becoming more and more expensive. In order to be sure that there was a general rise in the cost of labour in the Province, the Deputy Conservator addressed the Superintending Engineer in Sind on the subject, and Mr. Thompson gave it as his opinion that the cost of labour had risen during the last ten years more than 25 per cent. Unless, therefore, labour is imported, or people induced to emigrate from the more populous districts of India to Sind, where there is an abundance of room, all public works and forest operations will become more and more expensive.

23. It may be mentioned that the fuel used at Kotri is chiefly brought from the upper riverain forests in boats partly owned by the department and worked on the half-share system. This has proved an excellent system, one that gives the department the control of a number of boats, and prevents the boatmen on the river from combining and demanding exorbitant rates for the carriage of fuel.

Present system of department working of considerable advantage to the railway.

24. In order to fully carry out the system of the departmental cutting for locomotive fuel in those compartments selected for exploitation, and its delivery to the railway, it was necessary to have some one to come between those responsible for the cutting, and the railway, some one who should see that the fuel cut was suitable for locomotive purposes and that it was fairly stacked. The stacking, guarding, and delivery of all locomotive fuel has during the last twelve months been under the superintendence of a European, Mr. Clarkson, who undertook the work on contract. Hitherto the work of stacking and delivery had been done by the native contractors who cut the wood, and the result was that they were always trying to defraud both the Forest Department and the Railway, and were the cause of endless disputes between both departments. This has all been put a stop to. Mr. Clarkson has proved himself specially fitted for the work, and he has carried out the orders issued to him, to the entire satisfaction of the Deputy Conservator, with the result that not a single dispute between the two Departments has arisen during the year. It has been fully established that the present system of working is not only beneficial to the forests, but of considerable advantage to the railway also.

Exploitation of Minor Forest Produce.

Grazing.

25. The period under report has been marked by one of the heaviest rainfalls on record. An abundance of pasture and water were to be found on the hills, and there was no necessity for the hillmen to come for pasture to the forests, consequently there has been a considerable falling off in the grazing revenue of the Circle. Although the amount (Rs. 60,687) realised from grazing is large, and forms an important item of revenue, it would be well for the forests, if instead of admitting all who pay for it, some restriction could be placed on the number of cattle admitted to the forests. There can be no doubt that many of our forests, in addition to being overworked, are overgrazed. In compartments strictly enclosed for reproduction may be seen young growth and grass growing thickly together, and on the outside of the fence nothing but dust, dust blown about by the wind or scattered by wandering cattle; in some instances, licking up the dried babul blossoms from the ground, all pointing to overgrazing.

With forests in this condition and about one-third of the area of the Province cut off from the river by embankments, it is only reasonable to suppose that so long as this state of things lasts, the condition of these shut-out districts must be anything but satisfactory. Both cattle and people suffer, while the soil, deprived of its top dressing of silt, is gradually, but surely becoming impoverished.

26. Large irrigation works are under contemplation; before the works are completed, it is to be hoped that adequate provision will be made for irrigating the areas through which they pass, both for pasture and forest.

Miscellaneous produce.

27. During the period under report the collection of the following items of minor forest produce has been discontinued by order of the Commissioner in Sind, honey, ber fruit (*zizyphus jujuba*), and khar or crude soda. The products were unimportant and the Deputy Conservator willingly acquieseed in relinquishing them. Babul pods, lac and munj grass are the chief minor products now collected.

CHAPTER III.

Gross yield and outturn of Forest Produce.

A comparison between the Financial and Forest year not possible.

28. The following statement shows the outturn and sale of timber and firewood from the forests of the Sind Circle. They are prepared for the Financial and the Forest year respectively, the latter of which includes,

on this occasion, three extra months. It has not been thought necessary to compare the Forest with the Financial year, the former being for 15 months and the latter being for 12 months only. It may be pointed out that the great difference in the outturn of firewood was caused by the interference in forest operations recorded in the following chapter :—

29. The details of the working of the depôts are given in the following table :—

Names of Depôts.	Stock on hand on 1st April 1892.			Added during the Forest year.			Disposed of during the Forest year.			Balance on the 30th June 1893.		
	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.	Timber.	Posts and rafters.	Fuel.
	C. ft.	No.	Mds.	C. ft.	No.	Mds.	C. ft.	No.	Mds.	C. ft.	No.	Mds.
Shikarpur	30	3,484	...	517	6,305	...	176	7,045	...	371	2,744	...
Sukkur	4,215	11,290	...	26,053	56,726	...	19,492	51,366	...	10,776	16,620	...
Rohri	1,044	284	...	3,276	17,643	...	1,980	15,260	...	2,340	2,667	...
Larkano	49	...	300	...	...	3,400	36	...	3,700	13	...	...
Sehwan	...	2	...	10	8,944	...	10	8,946	...	...	...	...
Keti Bandar...	297	...	1,250	17,368	...	750	17,665	...	1,000	...	...	1,000
Kotri	...	...	10,653	31	14,142	191,912	31	9,137	184,315	...	5,005	18,250
Hyderabad	72	49,464	5,375	15,495	122,299	126,251	13,884	133,596	121,379	1,683	38,167	10,247
Total ...	5,707	64,434	17,578	62,750	226,059	322,313	53,274	225,350	310,394	15,183	65,143	29,497

30. The quantity of timber and firewood sold at each Depôt is given below.

Name of Depôts.	Timber c. ft.		Posts and Rafters, No.		Firewood, Mds.	
	1891-92.	Forest year 1892-93.	1891-92.	Forest year 1892-93.	1891-92.	Forest year 1892-93.
Shikarpur	494	176	6,568	7,045	...	...
Sukkur	12,039	19,492	29,266	51,366	350	...
Rohri	1,425	1,980	10,798	15,260	...	...
Larkana	19	36	...	...	7,455	3,700
Sehwan	...	10	8,038	8,946	...	...
Keti Bander	21,140	17,665	...	...	...	1,000
Kotri	1,536	31	510	9,137	1,90,228	1,84,315
Hyderabad	3,380	13,884	1,32,049	1,33,596	1,18,672	1,21,378
Total ...	40,033	53,274	187,229	225,350	316,705	310,394

31. The forest material cut from private forests and unoccupied Government waste Nos. and jagirs and imported for sale into the towns of Hyderabad and Kotri are given in the following statement.

Name of Town.	Babul logs. No.	Posts and Rafters of all kinds.	Firewood.	Charcoal.	Babul bark.	Lac.	Planks.	Reed.	Estimated value.
	No.	No.	Mds.	Mds.	Mds.	Mds.	No.	Bundles.	Rs.
Hyderabad	1,749	3,000	76,726	3,829	7,557	307	...	...	11,050
Kotri	1,515	36,237	55,186	1,292	5,818	...	645	...	2,287
Total ...	3,264	39,237	131,912	5,121	13,375	307	645	...	13,337

32. The following statement exhibits the quantity of timber supplied to Bombay and other Departments.

Name of Department.	Babul logs.	Babul sleepers.	Posts and Rafters of all kinds.	Babul Bolsters.	Babul Props.
	No.	No.	No.	No.	No.
North-Western Railway	...	835	...	1,552	...
Executive Engineer, Sharig	...	...	...	...	13,158
Harbour Works	...	50	...	...	...
Public Works Department	...	....	821	...	...
Gun Carriage Department	900	...	...	...	...
Hyderabad Jail	...	...	1,750	...	...
Total ...	900	885	2,571	1,552	13,158

33. The subjoined statement shows the quantity of firewood supplied under departmental Agency to the State Railway and other Departments and large consumers for 2 years.

To whom supplied.	Firewood in maunds.	
	1891-92.	Forest year 1892-93.
North-Western Railway	1,863,527	1,692,215
Hyderabad-Umarkot Railway	14,000	.....
Commissioner's Steamer "Jhelum"	24,450	27,584
Indus Ferry Steamers	57,675	66,622
River Conservancy Department	6,625	5,281
Public Works Department	28,200	43,488
Karachi Harbour Works'...	64,900	21,857
Commissariat Department	98,906	203,860
Hyderabad Water Works	67,438	52,000
Sukkur Municipality	10,500	10,400
Hyderabad Jail	2,718	4,178
Government Farm, Hyderabad	13,750	7,500
Nawab of Bahwalpur's steamers	4,244	.....
Seth Vishindas, Contractor	43,699	45,383
Local Board, Shikarpur and Hyderabad	...	6,975
Total ...	2,301,232	2,187,343

34. Statement showing the quantity of timber felled departmentally and disposed of in the Forests to private purchasers is given below :—

Division.	Timber.	Bahan Posts.	Bahan Rafters.	Jhau Rafters.
	C. ft.	No.	No.	No.
Sukkur	1,535	24	116	60
Naushahro	706	...	...	...
Hyderabad	981	800	1,500	...
Jerruck	637	...	...	...
Total ...	3,859	824	1,616	60

35. The following statement exhibits the value of timber and firewood removed from the forests other than that removed under the Permit Pass system for 2 years :—

Name of Division.	Timber.		Firewood.	
	1891-92.	Forest year. 1892-93.	1891-92.	Forest year 1892-93.
Sukkur	5,972	2,294	1,204	697
Naushahro	963	1,621	466	447
Hyderabad	908	2,596	2,480	3,763
Jerruck	629	811	329	622
Total ...	8,472	6,732	4,479	5,529

36. The following is a comparative statement showing receipts from different ghats or nakas in the Sind Circle.

Name of Division.	Name of Ghat.	Revenue realised.	
		1891-92.	Forest year. 1892-93.
Sukkur	Rahuja, Jhali, Rohri	9,929	13,086
	Saddar, Stewart, Khura	11,523	17,476
Naushahro	Larkana	2,309	2,549
	Garhi Yasin	938	1,167
Hyderabad	New Fuleli, Old Fuleli, Hajipur	1,168	1,721
	Total Rs. ...	25,867	35,999

37. Free grants of timber made to poor people residing in the vicinity of forests are shown below.

Division.	Amount.	Remarks.
	Rs.	
Sukkur	754	
Naushahro	239	
Hyderabad	202	
Jerruck	149	
Total ...	1,344	

38. Summary of Produce. Timber extracted from the forests by Government Agency.

Division.	Timber.		Posts.		Rafters.	
	Forest year 1891-92.	Forest year 1892-93.	1891-92.	Forest year 1892-93.	1891-92.	1892-93.
	C. ft.	C. ft.	No.	No.	No.	No.
Sukkur	15,913	23,183	8,615	14,297	38,385	59,872
Naushahro	2,609	5,143	534	1,372	7,955	7,574
Hyderabad	22,587	18,935	5,083	16,618	113,200	123,146
Jerruck	21,415	28,733	8,950	590	28,600	...
Total ...	62,524	75,994	23,182	32,877	188,140	190,592

39 The following is a comparative statement for 2 years of the quantity of timber cut and removed from the forests by purchasers :—

Division	Timber.		Posts.		Rafters.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-98.
	C ft.	C. ft.	No.	No.	No.	No.
Sukkur	5,729	1,836	770	304	57,677	15,150
Naushahro.....	1,687	2,563	...	50	32,425	20,123
Hyderabad.....	2,218	4,097	950	2,672	8,094	19,675
Jerruck	471	1,461	3,585	4,823	13,169	5,916
Total ...	10,105	9,957	5,305	7,849	111,365	60,864

40. The total yield of timber in each Division is given below for 2 years :—

Division.	Timber.		Posts.		Rafters	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
	C.ft.	C. ft.	No.	No.	No.	No.
Sukkur	21,642	25,019	9,385	14,601	96,062	75,022
Naushahro.....	4,296	7,706	534	1,422	40,380	27,697
Hyderabad.....	24,805	23,032	6,033	19,290	1,21,294	1,42,821
Jerruck	21,886	30,194	12,535	5,413	41,769	5,916
Total ...	72,629	85,951	28,487	40,726	299,505	251,456

41. The total yield of firewood in each Division is given below :—

Division.	Firewood, Mds.	
	1891-92.	1892-93.
Sukkur	1,429,661	1,434,547
Naushahro	500,822	558,890
Hyderabad	834,662	900,773
Jerruck	242,882	239,531
Total ...	3,008,027	3,133,741

42. The total yield in charcoal is as under :—

Division.	Charcoal, Mds.	
	1891-92.	Forest year, 1892-93.
Sukkur	1,486	2,970
Naushahro	9,896	11,873
Hyderabad	4,886	7,557
Jerruck	42,409	52,867
Total ...	58,677	75,267

43. The total yield of timber and firewood and charcoal in cubic feet is given in the subjoined statement :—

Name of Division.	Outturn in cubic feet.			
	Timber of all kinds.		Firewood and charcoal.	
	1891-92.	1892-93.	1891-93.	1892-93.
Sukkur	77,824	76,296	7,777,487	7,924,123
Naushahro	29,368	23,918	3,458,707	3,342,680
Hyderabad	90,665	107,477	4,705,505	5,265,260
Jerruck	41,873	42,849	1,984,562	3,154,491
Total ...	239,730	250,540	17,926,261	19,686,554

44. The total yield of the Circle in timber, firewood and charcoal is given below :—

Kind of Timber.	Quantity.	1891-92.	1892-93.
Timber	C. ft.	72,629	250,540
Posts	No	28,487	40,726
Rafters	No	299,505	251,456
Sleepers	No	3,626	926
Firewood	Mds.	3,008,027	3,133,741
Charcoal	Mds.	58,677	75,267

45. The realisation by sale of farms for removal of Minor Produce and the right to fish in forest waters is given below for 2 years.

Division.	Babul pods.		Lac.		Munj and Sargrass, &c.		Fishery.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Sukkur	428	756	...	...	1,034	932	1,848	1,625
Naushahro	1,954	2,717	...	...	729	1,114	1,033	1,356
Hyderabad	8,296	12,667	2,372	8,067	161	218	644	605
Jerruck	3,893	3,319	205	596	...	...	405	638
Total ...	14,567	19,459	2,577	8,663	1,924	2,264	3,930	4,224

46. The revenue from grazing dues in each Division is given below :—

Name of Division.	Grazing Fees.	
	1891-92.	Forest year, 1892-93.
Sukkur	17,133	20,041
Naushahro	10,151	11,818
Hyderabad	16,825	13,344
Jerruck	14,891	15,484
Total ...	59,000	60,687

47. The area under cereal cultivation and the amount realised by assessment in each Division is given in the following statement :—

Division.	Area under cultivation.				Amount realised by assessment.			
	Kharif.		Rabi.		Kharif.		Rabi.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Sukkur	250	479	1,877	2,523	582	1,091	8,012	10,108
Naushahro	364	240	3,977	2,668	1,017	636	11,937	7,925
Hyderabad	247	146	1,060	1,027	791	542	2,313	2,994
Jerruck.....	788	379	379	53	1,916	1,438	832	137
Total ...	1,649	1,244	7,293	6,271	4,306	3,707	23,094	21,464

CHAPTER IV.

Financial Results.

Receipts and Expenditure.

48. The total receipts and expenditure for the financial and Forest years are given in the following table :—

	Actuals, 1891-92.	Actuals, 1892-93.	Actual Forest year, 1892-93.
	Rs.	Rs.	Rs.
Receipts	7,74,210	6,81,223	7,91,031
Expenditure—			
A.—Conservancy and Works ...	4,10,390	3,66,488	4,19,135
B.—Establishment	91,546	98,765	1,25,196
Total Expenditure ...	5,01,936	4,65,253	5,44,331
Net Revenue ...	2,72,274	2,15,970	2,46,700

Causes of the decrease in Revenue.

49. The period under report has been a most unfortunate one for forest operations. For the first three months cholera raged throughout the Province making it impossible to get labour; this was followed by quite an abnormal rainfall and disastrous floods which rendered all forest operations impossible. Four months thus passed without anything being done. The inundation period then set in, and it was not until the end of October that exploitation really began. To add still further to our embarrassment, the river which usually rises in July, rose a month earlier than usual and forest operations in the river-ain forests ceased at the beginning of June.

CHAPTER V.

Forest Administration.

The controlling staff : necessity for European supervision.

50. In last year's report it was pointed out that Colonel MacRae had retired from the service in May 1891, and that Mr. Hexton had been appointed 3rd Grade Conservator of Forests and placed in charge of the Circle. From the 1st April 1892, owing to sanction having been received from

the Secretary of State for India for the abolition of the Conservatorship of the Sind Circle, Mr. Hexton had to revert to the grade from which he had just been promoted, *viz.*, 1st grade Deputy Conservator of Forests. The abolition of the Conservatorship was, it appears, carried out solely on the recommendation of Colonel MacRae, who was under the impression that the Sind forests did not require European supervision. Experience has shown that he was in error both as to the state of the forests and the requirements of the Province, and now owing to his want of foresight, many parts of the Sind forests are, and will be for some years, absolutely useless. Government are no doubt by this time aware that the abolition of the Conservatorship was a great mistake, and are also fully alive to the fact that instead of trusting to native Divisional Forest Officers, as recommended by Colonel MacRae, it is of the utmost importance that the Divisions of the Circle should be under European trained men on the Imperial Forest List.

Dr. Schlich, when he re-organised the Sind Forest Department, saw the necessity for this, and it may be mentioned that in his time the three divisions of the Circle were in charge of European officers; had they been allowed to remain the condition of the forests would in all probability have been very different from what it now is. The above remarks are made in no spirit of ill-will against Colonel MacRae, but the Deputy Conservator feels it his duty to place before Government the true state of the Sind forests and to make suggestions for their improvement. A good start has now been made on a sound basis, and it only rests with Government to provide the necessary controlling power in order to carry it to a successful issue.

51. Mr. Nirbdas, Divisional Forest Officer, Jerruck, retired on 14th May 1892, and Mr. J. Baptista arrived on 15th June 1892.

Divisional Forest Officers.

52. The subjoined statement shows the officers who held charge of the different Divisions of the Sind Circle during the year under report :—

Name.	Division.	From	To	Remarks.
G. M. Ryan	Sukkur	1st April 1892	4th July 1892	Mr. Hexton proceeded on privilege leave on 5th May 1892, and Mr. Ryan was appointed to act for him up to 24th June 1892, when he was relieved by Mr. Hexton on 25th idem, in the forenoon.
J. Baptista	Do.	5th July ,, ...	30th June 1893	
Tuljaram	Naushahro	1st April ,, ...	7th July 1892	
O. H. L. Napier ...	Do.	8th July ,, ...	30th June 1893	
Showkiram	Hyderabad	1st April ,, ...	30th ,, ...	
Neribdas	Jerruck	1st April ,, ...	14th May 1892	
G. M. Ryan	Do.	15th May ,, ...	14th June ,, ...	
J. Baptista	Do.	15th June ,, ...	4th July ,, ...	
G. M. Ryan	Do.	5th July ,, ...	30th June 1893	

The trained Range Forest officers of the circle.

53. A fifth trained Range Forest Officer having passed through the College of Science, Poona, was added to the establishment and four others are still in training.

Inadequacy of the Subordinate Establishment Office and Protective.

54. For some time past the Deputy Conservator has felt that the subordinate establishment under him, owing to its numerical weakness, and, in many instances to the inefficiency of the men, has been unable to cope with the work of the Circle. In former years men were not, I am afraid, appointed, because of any particular fitness for the work they were about to undertake. The pay and prospects were not sufficient to tempt good men into the service; and although service in the Forest Department is by no means unpopular, there can be little doubt that many who entered the service did so in the hope that there would be little pickings to be made. Looking at the price of labour in the Province, and the wages demanded by the lowest of house-

hold servants, it is absurd to think that pay ranging from Rs. 6 to Rs. 8 for a Forest Guard; Rs. 10 to Rs. 15 for a Sub-Ranger; Rs. 20 to Rs. 40 for a Forester; and Rs. 50 to Rs. 80 for a Forest Ranger is at all adequate. When a common coolie can command from seven to eight annas a day, a Forest Guard on Rs. 6 per mensem cannot but have an itching palm, which, in many instances, is, I feel sure, satisfied either at the expense of Government or villagers living on the borders of the forests. Given such a state of things, with native supervision, as recommended by the late Conservator, Colonel MacRae, and what can be expected? The Deputy Conservator has refrained from making any representation on this subject pending the decision of Government on the scheme for the reorganization of the subordinate staff submitted to the Government of India about two years ago. The necessity, however, for some change is great, and the Deputy Conservator feels that it would be unwise to delay making his proposals for the reorganization of the subordinate establishment of the Sind Circle any longer. Proposals, therefore, on the subject will be submitted to Government through the Commissioner in Sind at an early date.

The Deputy Conservator's visit to Changa Manga.

55. During the period under report the Deputy Conservator was directed to visit Changa Manga to collect information with a view of starting an irrigated plantation in Sind, as recommended by the Secretary to the Government of India in his No. 1555 F, dated the 28th December 1892, Revenue and Agricultural Department (Forests), embodied in Bombay Government Resolution No. 571, dated the 20th January 1893. The Deputy Conservator went to Changa Manga, made a careful inspection of the plantation, studied the system of irrigation and working, and on his return sent in an exhaustive report, in which he stated that should Government decide on an irrigated plantation in Sind, he was prepared to submit proposals for its formation and working. Correspondence respecting the water-supply of such a plantation has taken place with the Irrigation Department, and the Deputy Conservator has requested Mr. Thompson, in his estimates for the new Shikarpur Canal, to provide for the irrigation of 1,000 acres of forest land in the Sultan Kot Reserve through which the new canal will run. What has been done in this case might, as suggested in para. 26 of this report, always be done when any irrigation works are in course of contemplation.

Irrigation works should be constructed with a view to forest preservation.

56. The Deputy Conservator feels it his duty to point out that forest administration is rendered much more difficult than it formerly was owing to the fact that many of the irrigation works have been constructed without the slightest thought as to forest preservation. There can be no doubt that the bunds, as at present constructed, are a source of trouble to many. They add considerably to the difficulties of the Forest officer, who, owing to the destruction of the grazing grounds of the Province, finds his forests overgrazed and his compartments closed for reproduction invaded by hungry and wandering cattle; forests upon which he may have relied for a supply of timber and fuel he finds gradually drying up, while the adjacent jungles are but the remains of former greatness, all adding to the difficulties of forest administration. Not only are they a source of trouble to the forest officer, but to the villages of many districts also. Relying on the protection a bund is supposed to afford, a village is built in some depression sheltered from the wind, the bund bursts, and the villages barely escape with their lives. To the railway they are a constant source of annoyance and expense, for relying on the bunds as a protection from the floods, the lines are constructed in some instances with insufficient culverts and bridges to carry off the immense volume of water set free by the bursting of a bund, the line is breached in, perhaps, several places, the whole export trade of the Province is either at a stand-still or traffic is diverted, perhaps never to return. It is doubtful whether the soil of Sind is as fertile as it once was. The silt which was once carried over the soil, furnishing a splendid manure, is now carried down the river, choking its mouth, and gradually but surely stopping up all communication with the sea. The question of bunds is one requiring careful consideration, both from a forest point of view, and as regards the trade and general

welfare of the Province, and the Deputy Conservator feels that no apology is needed for calling attention to a subject of such paramount importance.

The Forest area in the Thar and Párkar District.

57. The management of the forest area in the Thar and Párkar District is still in the hands of the Deputy Commissioner of the District, with a retired Range Forest Officer at its head, the funds being supplied by, and a portion of the receipts credited to, this Department.

The Divisional Forest Officers.

58. The thanks of the Deputy Conservator are due to the Divisional Forest Officers of the Circle for the valuable assistance they have rendered during the year which has been an exceptionally difficult one. The new system of working, a system unpopular with forest subordinates, and disliked by wood-cutters and residents on the borders of the forests, could not have been so successfully carried on without their hearty co-operation, and the Deputy Conservator has specially to thank Messrs. Ryan, Napier and Showkiram for the assistance they have rendered him.

Work of the office establishment.

59. The work of the office has increased very much of late. Three times as many letters pass through it as in the time of Colonel MacRae, and the office establishment has all been overworked. The Deputy Conservator has to record the good and willing work of Mr. Parmanand, the Head Accountant, to whom special thanks are due, and to Mr. Parmanand, Head Clerk, and Mr. Kundanmal, 2nd Clerk, for the ready assistance they have rendered him.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

No. 4469 OF 1893.

REVENUE DEPARTMENT.

Commissioner's Office
On the Indus, 12th November 1893.

Submitted to Government.

2. The total area under reserved forests stood at 986 square miles and 600 acres on 31st March 1892. To this 7 acres were added and 11 square miles and 558 acres were excluded for purposes enumerated in para. 1 of the Administration Report, reducing the area to 975 square miles and 49 acres at the close of June 1893. There was no change in the area under protected forests.

3. The total area lost by erosions during the year amounted to 9,027 acres, while that gained by accretions was 6,661 acres. As remarked by Mr. Hexton, the former figures very nearly represent the correct area lost, but the latter show only the approximate area gained by the action of the river. It is true that the gain cannot be compared with the present loss; but there is no gainsaying that the area gained will prove a useful addition to the forest area in course of time.

4. The oft-repeated complaint of the Deputy Conservator of Forests, Sind Circle, that the sustained yield of the forests, including the revenue jungles, is not sufficient to meet the increasing demands of the Province has been met by the appointment of a special Forest Settlement and Demarcation Officer for acquiring additional forest areas. This officer entered upon his new duties on the 23rd of November 1892, and could not be reasonably expected to do much more than what he is described to have done. The Acting Commissioner, however, has full confidence in the judgment of this special officer, and there is no doubt that under the instructions issued by Mr. James, sufficient area will be added to the Sind forests in due course to make the sustained yield equal to the demand. The special Forest and Demarcation Officer has forwarded no report to the Acting Commissioner, but he will be instructed to submit one next year, through the Deputy Conservator, for incorporation in the Sind Forest Administration Report as usual.

5. The system of working plan to which allusion was made last year was introduced during the year under report with satisfactory results.

6. The cases dealt with under Section 67 of the Indian Forest Act decreased in the Sukkur, Nausháhro and Hyderabad Divisions, while those in the Jerruck Division show an increase for which no explanation has been given in the report. It is true that the figures for 1892-93 embrace a period of 15 months, but those for the Jerruck Division do not show any decrease corresponding with that in the three northern Divisions. Mr. James' remarks on this subject, contained in para. 6 of his review of the last year's Administration Report, were so plain that no Divisional Forest Officer of average ability could have misunderstood him and abstained from prosecuting offenders when this course was desirable in any case. The Acting Commissioner, however, finds that Mr. Hexton has already taken steps to remove the misunderstanding among his subordinates, and therefore no further remarks are called for.

7. It is satisfactory to note that the number of fires and the destruction caused by them were much less than in the previous year.

8. The Deputy Commissioner has again alluded to the natural production in forests being checked by the construction of protective river embankments. The Acting Commissioner need only remark that these embankments are essential to protect large agricultural interests of the country. The drying up of inland forests is, therefore, inevitable, and this has necessitated a change in the policy of adding any inland forest area as discussed in para. 3 of Mr. James' review of the last year's Administration Report, and to which no further allusion is necessary. But the desirability of affording irrigational facilities for existing inland forests, where these can be provided without detriment to agricultural interests, will not be lost sight of.

9. The forest revenue during the financial year 1892-93 amounted to Rs. 6,81,223 as against Rs. 7,74,210 in the preceding year, *i. e.*, Rs. 92,987 less. The total expenditure in 1892-93 was Rs. 4,65,253 as compared with Rs. 5,01,936 in 1891-92, or less by Rs. 36,683. These results are attributed by the Deputy Conservator to the year having proved unfortunate for forest operations. There was cholera in the beginning of the year. This was succeeded by an abnormal rainfall and high inundation which covered the country with floods, rendering forest operations difficult.

10. As remarked in para. 11 of the last year's review, the Deputy Conservator has not furnished the necessary particulars as to the revenue derived from the sale of wood grown in revenue jungles. But on a separate reference from this office he promises to distinguish between this source of revenue in his future reports.

11. The Deputy Conservator's proposals for strengthening the subordinate forest establishment in Sind will be dealt with separately when received. No remark on this subject is, therefore, necessary in this forwarding memo.

12. Mr. Hexton has administered his department during the year under report with his usual zeal and energy.

R. I. CRAWFORD,
Acting Commissioner in Sind.

FORM

FOREST DEPARTMENT, BOMBAY,

Area of Reserved

Divisions.	Civil Districts.	Names of Forests.	Area on 1st April 1892.		Added during the year.
			Acres.	Equivalent in square miles.	Acres.
Sukkur ...	Shikarpur ...	Naoti	8,129	12·449	...
		Daresh	1,725	2·445	...
		Ubauro	3,150	4·590	...
		Mirpur	7,251	11·211	...
		Raharki	1,654	2·374	...
		Reti	2,388	3·468	...
		Rangu	972	1·332	...
		Narli	1,376	2·96	...
		Sarhad	3,529	5·329	...
		Islam	2,064	3·144	...
		Jehanpur	4,340	6·500	...
		Bahab	8,985	14·25	...
		Budh	1,217	1·577	...
		Sadhuja	7,641	11·601	...
		Shahpur	11,215	17·335	...
		Pawhari	587	0·587	...
		Hussenbeli	3,407	5·207	...
		Azizpur	880	1·240	...
		Ding	1,543	2·263	...
		Syedpur	8,216	12·536	...
		Rohri	22,551	35·151	...
		Sultanpur	1,753	2·473	...
		Saliani	5,014	7·534	...
		Ghotki	4,200	6·360	... 7
		Adilpur	12,676	19·516	
		Walu Mahar	2,648	4·88	...
		Sumowah	2,252	3·332	...
		Wasir	1,417	2·137	...
		Jarwar	2,839	4·279	...
		Abad	5,604	8·484	...
		Kadirni Bindi	2,306	3·386	...
		Khia Bindi	3,118	4·558	...
		Shah	13,433	20·633	...
		Bindi Dhareja	6,866	10·466	...
		Kadrapur	2,564	4·4	...
		Mohro Mari	11,857	18·337	...
		Andaldal	12,104	18·584	...
		Bagarji	13,884	21·444	...
		Raiswah	905	1·265	...
		Lakhi	3,614	5·414	...
		Ghari Halim	2,096	3·176	...
		Kot Sultan	17,342	27·62	...
	Upper Sind Frontier	Jamshero	6,616	10·216	...
		Abad	985	1·345	...
		Mehrabpur	991	1·351	...
		Dilawarpur	925	1·285	...
		Milkiat Sircar	1,923	3·3	...
		Bakapur	9,839	15·239	...
		Dilmurad	1,141	1·501	...
		Zangipur	5,334	8·214	...
		Sarki	3,773	5·573	...
		Baluchabad	765	1·125	...
		Korar	875	1·235	...
		Mirpur	6,978	10·578	...
		Jangan	2,291	3·371	...
		Karampur	5,770	9·10	...
		Keti Sadhuja	6,001	9·241	...
		Total Sukkur Division...	285,519	446·79	7
Naushahro	Shikarpur	Dosu	4,033	6·193	...
		Keti Ubhuro	5,575	8·455	...
		Kanuri	3,630	5·430	...
		Sharifpur	1,027	1·387	...
		Bahman	1,547	2·267	...
		Naoabad	2,205	3·285	...
		Phati Bilawal	711	1·71	...
		Amrote	11,684	18·164	...
		Muso	4,755	7·275	...
		Kasimshah	2,056	3·136	...
		Nari	1,419	2·139	...
		Dangar	3,685	5·485	...
		Soi	5,108	7·628	...
		Bulo Dero	1,555	2·275	...
		Ghangherko	5,849	9·89	...
		Gaji Dero	4,333	6·493	...
		Garhi Yasin	25,328	39·368	...

Hyderabad,
12th October 1893.

...		8,129	12·449	
...		1,725	2·445	
...		3,150	4·590	
...		7,251	11·211	
...		1,654	2·374	
...		2,388	3·468	
...		972	1·332	
...		1,376	2·96	
...		3,529	5·329	
...		2,064	3·144	
...		4,340	6·500	
...		8,985	14·250	
...		1,217	1·577	
...		7,641	11·601	
...		11,215	17·335	
...		587	·587	
...		3,407	5·207	
...		880	1·240	
...		1,543	2·263	
...		8,216	12·536	
...		22,551	35·151	
...		1,753	2·473	
...		5,014	7·534	
...		4,200	6·360	
...		12,683	19·523	No. 3,432 of 12th May 1893.
...		2,643	4·88	
...		2,252	3·332	
...		1,417	2·137	
...		2,839	4·279	
...		5,604	8·484	
...		2,306	3·396	
...		3,148	4·558	
...		13,433	20·633	
...		6,866	10·466	
...		2,564	4·4	
...		11,857	18·337	
...		12,104	18·584	
...		13,884	21·444	
...		905	1·265	
...		3,614	5·414	
...		2,096	3·176	
...		17,342	27·62	
...		6,616	10·216	
...		985	1·345	
...		991	1·351	
...		925	1·285	
...		1,923	3·3	
...		9,839	15·239	
...		1,141	1·501	
...		5,334	8·214	
...		3,773	5·573	
...		765	1·125	
...		875	1·235	
...		6,978	10·578	
...		2,291	3·371	
...		5,770	9·10	
...		6,001	9·241	
...		285,526	446·86	
...		4,033	6·193	
...		5,575	8·455	
...		3,630	5·430	
...		1,027	1·387	
...		1,547	2·267	
...		2,205	3·285	
...		711	1·71	
...		11,684	18·164	
...		4,755	7·275	
...		2,056	3·136	
...		1,419	2·139	
...		3,685	5·485	
...		5,108	7·628	
...		1,555	2·275	
...		5,849	9·89	
	95	4,238	6·398	Commissioner's No. 2238 of 14th June 1893, transferred to Public Works Department.
...		25,328	39·368	

Naushahro—*continued.*	Hyderabad	Bhour ...	10,539	16·299	...
		Mohbatdero	8,045	12·365	...
		Samtia ...	3,390	5·190	...
		Kamaldero	1,365	2·85	...
		Bhorti ...	10,790	16·550	...
		Dalipota	867	1·227	...
		Khairodero	13,073	20·273	...
		Lalia ...	4,192	6·352	...
	Karachi ...	Karampur	2,924	4·364	...
		Bagban ...	1,947	3·27	...
		Bhan ...	1,138	1·498	...
		Phaka ...	2,207	3·287	...
		Kalubori	748	1·108	...
		Pipri ...	925	1·285	...
		Total Naushahro Division ...	146,650	229·90	...
Hyderabad	Hyderabad	Lakhat ...	6,389	9·620	...
		Nasri ...	1,556	2·276	...
		Mad ...	2,642	4·82	...
		Mehrabpur ...	3,338	5·138	...
		Mari ...	14,753	23·33	...
		Pai ...	5,130	8·10	...
		Keti Jurio ...	2,125	3·205	...
		Rano ...	1,627	2·347	...
		Narkeli ...	4,061	6·221	...
		Bhanote ...	841	1·201	...
		Khanote ...	8,666	13·346	...
		Khebrani ...	760	1·120	...
		Sekhat ...	2,089	3·160	...
		Jakhri ...	1,926	3·6	...
		Matiari ...	5,354	8·284	...
		Ghali ...	3 041	4·481	...
		Miani ...	4,917	7·457	...
		Katiri ...	756	1·116	...
		Gundi ...	2,150	3·230	...
		Mahamed Khan ...	181	·181	...
		Jamshoro ...	292	·292	...
		Shahmakai ...	411	·411	...
		Keti Mehrani ...	5,523	8·483	...
	Karachi ...	Gidarji ...	855	1·215	...
		Butho ...	7,718	12·68	...
		Manjhand ...	1,539	2·239	...
		Mirpur ...	10,705	16·465	...
		Ghag ...	1,296	2·16	...
		Karokho ...	1,701	2·421	...
		Total Hyderabad Division...	102,354	159·594	...
Jerruck	Karachi ...	Viran ...	9,142	14·182	...
		Sonda ...	2,114	3·194	...
		Hillaya ...	2,898	4·338	...
		Lalang ...	5,151	8·31	...
		Shah Lanko ...	1,690	2·410	...
		Garko ...	4,079	6·239	...
		Kacho Shah Lanko ...	313	·313	...
		,, Ali Ganj ...	715	1·75	...
		,, Bao Purandas ...	6,413	10·13	...
		,, Bijora ...	5,890	9·120	...
		,, Chachh ...	3,362	5·162	...
		Malir ...	24	·24	...
		Kacho Alibahar ...	3,000	4·440	...
		,, Surjani ...	3,410	5·210	...
		,, Kot Almo ...	2,335	3·415	...
		Penah ...	6,169	9·409	...
		Susati ...	39	·39	...
		Khirsur ...	1,380	2·100	...
		Huderani ...	5,511	8·391	...
		Surjani ...	1,364	2·84	...
		Ganj ...	2,228	3·308	...
		Hazari ...	2,483	3·563	...
		Makbulo ...	496	·496	...
		Laikpur ...	7,406	11·366	...
		Khadi ...	4,500	7·20	...
		Phatah ...	258	·258	...
		Mulchand ...	5,454	8·334	...
	Hyderabad	Husri ...	420	·420	...
		Khatro ...	416	·416	...
		Khathar ...	2,975	4·415	...
		Katiar ...	952	1·312	...
		Khirdahi ...	290	·290	...
		Tikhur ...	1,709	2·429	...
		Khokhar ...	1,556	2·276	...
		Bud ka Takar ...	975	1·335	...
		Total Jerruck Division...	97,117	151·477	...
		Grand Total of the Sind Circle ...	631,640	986·600	7

No. 46.

SIND CIRCLE.

Forests, 1892-93.

Excluded or transferred to other heads.	Area on 30th June 1893.		No. and date of Notification of addition or transfer.	REMARKS.
Acres.	Acres.	Equivalent in square miles.		
...	10,539	16·299		
...	8,045	12·365		
...	3,390	5·190		
...	1,365	2·85		
...	10,790	16·550		
...	807	1·227		
...	13,073	20·273		
...	4,192	6·352		
...	2,024	4·364		
...	1,947	3·27		
...	1,138	1·498		
...	2,207	3·287		
...	743	1·108		
...	925	1·285		
95	146,555	228·635		
...	6,380	9·620		
...	1,556	2·276		
...	2,642	4·82		
...	3,338	5·138		
...	14,753	23·33		
...	5,139	8·10		
...	2,125	3·265		
...	1,627	2·347		
...	4,061	6·221		
...	841	1·201		
...	8,666	13·346		
...	760	1·120		
...	2,080	3·160		
...	1,926	3·6		
...	5,354	8·234		
...	3,641	4·481		
...	4,917	7·437		
...	756	1·116		
...	2,150	3·230		
...	181	·181		
...	292	·292	No. 9065 of 17th November 1892.	
97	314	·314	No. 1951 of 22nd March 1892.	
...	5,523	8·403	No. 2479 of 10th April 1893.	
...	855	1·215		
...	7,748	12·68		
...	1,539	2·259		
...	10,705	16·465		
...	1,296	2·16		
...	1,701	2·421		
97	102,257	159·497		
...	9,142	14·182		
...	2,114	3·194		
...	2,893	4·338		
...	5,151	8·31		
...	1,690	2·410		
...	4,079	6·239		
...	313	·313		
...	715	1·75		
...	6,413	10·13		
...	5,890	9·130		
...	3,362	5·162		
...	24	·24		
...	3,000	4·440		
...	3,410	5·210		
...	2,338	3·415		
...	6,169	9·409		
...	39	·39		
...	1,380	2·100		
...	5,511	8·391		
...	1,364	2·84		
...	2,228	3·398		
...	2,483	3·563		
...	496	·496		
7,406	...	...	No. 8013 of 10th October 1892.	
...	4,500	7·20		
...	258	·238		
...	5,454	8·334		
...	420	·420		
...	416	·416		
...	2,975	4·415		
...	952	1·312		
...	290	·290		
...	1,709	2·429		
...	1,556	2·276		
...	975	1·335		
7,406	89,714	140·111		
7,598	624,049	975·49		

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

ANNUAL FORM No. 46 A.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.—AREA OF PROTECTED FORESTS, 1892-93.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 189 .		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1893.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
				M. A.				M. A.		
Sukkur	Upper Sind Frontier ...	Macaulay	183	0 183	...	...	183	0 183		
		Dickinson	585	0 585	...	...	585	0 585		
		Total ...	768	1 128	...	...	768	1 128		
Jerruck	Karachi	Kacho Sonda	117	0 117	...	...	117	0 117		
Naushahro ...	Karachi	Karampur ..... Shahgarh Dhadon	2,347	3,427	...	...	2,347	3,427		
		Total ...	3,232	5 32	...	...	3,232	5 32		

Conservator's Office,
Hyderabad, 12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 52.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.

Register of breaches of Forest Rules during 1892-93.

Forest Division and Civil District.		Cases pending from 1891-92.	New Cases of the Year.					Total cases.	Disposed of during the Year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Sukkur ...	A	6	...	11	5	2	18	24	7	27	13	41	20	68	4
	B	...	...	175	1,199	1	1,375	1,375	1,375	1,381	...	...	1,375	1,381	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total	6	...	186	1,204	3	1,393	1,399	1,382	1,408	13	41	1,395	1,449	4
Naushahro ...	A	3	1	9	2	1	13	16	7	19	5	8	12	27	4
	B	...	...	54	163	...	217	217	217	217	...	...	217	217	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total	3	1	63	165	1	230	233	224	236	5	8	229	244	4
Hyderabad ...	A	2	1	4	8	2	15	17	10	21	5	15	15	36	2
	B	...	...	101	243	..	344	344	344	344	...	...	344	344	...
	C	...	1	3	...	...	4	4	...	...	...	...	...	...	...
	Total	2	2	108	251	2	363	365	354	365	5	15	359	380	2
Jerruck ...	A	...	...	4	...	...	4	4	1	1	3	3	4	4	...
	B	...	...	34	456	1	491	491	491	491	...	...	491	491	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total	...	...	38	456	1	495	495	492	492	3	3	495	495	...
Grand Total...	A	11	2	28	15	5	50	61	25	68	26	67	51	135	10
	B	...	..	364	2,061	2	2,427	2,427	2,427	2,433	...	...	2,427	2,433	...
	C	...	1	2	...	...	4	4	...	...	...	...	...	...	...

N. B.—A means cases taken into Court.
B means cases disposed of under Section 67 of the Indian Forest Act, 1878.
C means undetected cases.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

Hyderabad,
12th October 1893.

FORM No. 53.

FOREST DEPARTMENT, SIND CIRCLE.

Area of Forest tracts protected from fire during the dry season of 1892, to accompany report for 1892-93.

Divisions.	Forest tracts.	Year in which commenced.	Area actually protected up to 30th June 1892.	During dry season, 1893.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failure.	Area actually protected.		
			Acres.	Acres.	Acres.	Acres.		
Sukkur	Mirpur	Not known ...	42,386	36,578	15	36,563		
	Kashmore		.....	6,616	30	6,586		
	Ghotki		25,802	26,039	464	25,575		
	Sadhuja		70,674	73,009	259	72,750		
	Abad		51,729	51,749	2	51,747		
	Sukkur		25,842	25,988	503	25,485		
	Shikarpur	1887-88	23,957	23,957	.....	23,957		
	Jacobabad	1885-86	15,431	15,431	.....	15,431		
	Thul	1885-86	26,927	26,927	.....	26,927		
Naushahro	Bakrani	Not known ...	18,098	17,798	2	17,796		
	Kandiaro		17,887	17,887	280	17,607		
	Sehwan		600	600	.....	600		
Hyderabad	Rano	Do.	10,590	10,720	50	10,670		
	Unarpur		12,600	13,050	40	13,010		
	Miani		3,833	3,833	.....	3,833		
	Kotri		500	500	.....	500		
Jerruck	Viran	Do.	3,829	3,829	3	3,826		
	Shahbandar		7,376	7,376	581	6,795		
	Mulchand		6,013	3,547	10	3,537		
	Katiar		1,603	1,603	.....	1,603		
	Total ...	.....	365,677	367,037	2,239	364,798		

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 56.

FORM No. 56.

FOREST DEPARTMENT, SIND CIRCLE.—AREA OF PLANTATIONS, 1892-93.

Divisions.	Names of Plantations.	Area in Acres				Receipts	Charges	Remarks.
		On 1st April 1892.	Added during the year.	Excluded during the year.	Area on 30th June 1893.	of the year.		
	Regular plantation.							
Sukkur ...	Aliwahan Garden	20	...	20	...	10	105	Entirely washed away by the river.
	Rahuja Nursery	10	...	...	10	81	675	
	Shah Plantation	7	...	...	7	...	...	
	Sadhuja do.	34	...	...	34	...	105	
Hyderabad ...	Devi-Devi Plantation	13	...	...	13	275	256	
	Bamboo do	13	...	...	13	...	...	
	Miani Bungalow, Mango and Monument Gardens ...	12	...	...	12	920	909	
Jerruck ...	Malir Nursery	24	...	...	24	50	105	
	Sonda do.	5	...	...	5	120	...	
	Total Regular Plantations ...	138	...	20	118	1,456	2,155	
	Cultural Operations.							
Sukkur ...	Abad	695	...	...	695	...	...	
	Bindi Dhareja	754	780	...	1,534	...	...	
	Shah	68	150	...	218	...	...	
	Mohro Mari	45	320	...	365	...	...	
	Khia Bindi	22	115	...	137	...	...	
	Kadrapur	360	275	...	635	...	..	
	Rohri	1,018	...	1,018	...	...	...	1,018 Acres opened to grazing.
	Syadpur	16	...	...	16	...	...	
	Saliani	28	...	28	...	...	...	28 Do. do.
	Sultanpur	23	...	23	...	...	...	23 Do. do.
	Azizpur	20	...	20	...	...	...	20 Do. eroded by river.

	Ding	10	...		10	...	...	...	10	Do.	do.
	Adilpur	20	...	...		20	...	...			
	Raoti	30	...	...		30	...	...			
	Jehanpur	...		6	...	6	...	...			
	Sarhad	...		8	...	8	...	...			
	Mirpur	...		6	...	6	...	...			
	Gublo	5	...		...	5	...	...			
	Garhi Halim	10	...		...	10	...	...			
	Lakhi	3	...		...	3	...	...			
	Kote Sultan	500	...		...	500	...	...			
	Andaldal	28	...		...	28	...	...			
	Bagirji	3	...		...	3	...	...			
	Keti Bagirji	50	...		...	50	...	...			
	Total ...	3,708	1,660		1,099	4,269	...	...			
Nushahro...	Mohbatdero	590	260		...	850	...	...			
	Bhour	1,634	...		...	1,634	...	...			
	Kamaldero	100	...		...	100	...	...			
	Bhorti	50	320		...	370	...	...			
	Samtia	...	180		...	180	...	...			
	Dalipota	125	...		...	125	...	...			
	Karampur	25	20		...	45	...	...			
	Phaka	250	5		...	255	...	...			
	Carried forward ...	2,774	785		...	3,559	...	...			

				Brought over...	2,774	785	...	3,559	...	...
Naushahro...	Pipri	...	...	... ...	267	...	...	267	...	...
	Baghban	...	...	... ...	17	5	...	22	...	...
	Kalubori	...	...	... ...	20	...	...	20	...	...
	Bhan	...	...	... ...	100	...	...	100	...	...
	Khairodero	...	...	... ...	...	320	...	320	...	...
	Lalia	...	...	... ...	...	30	...	30	...	...
	Sharifpur	...	...	... ...	45	...	...	45	...	...
	Amrote	...	...	... ...	110	...	...	110	...	...
	Muso	...	...	... ...	90	...	...	90	...	...
	Bahman	...	...	... ...	30	...	...	30	...	...
	Keti Ubhuro	...	...	... ...	3	...	...	3	...	...
	Dosu	...	...	... ...	...	147	...	147	...	...
	Gajidero	...	...	... ...	15	15	...	30	...	...
	Nari...	...	...	... ...	...	12	...	12	...	...
	Kasimshah	...	...	... ...	...	11	...	11	...	...
	Soi ...	...	...	... ...	...	15	...	15	...	...
	Budodero	...	...	... ...	...	14	...	14	...	...
	Dangar	...	...	... ...	...	15	...	15	...	...
				Total ...	3,471	1,369	...	4,840	...	...
Hyderabad...	Nasri	...	...	... ...	160	480	...	640	...	...
	Mad	...	...	... ...	646	320	...	966	...	...
	Mehrabpur	...	...	... ...	489	80	...	569	...	...
	Mari	...	...	... ...	1,536	320	...	1,856	...	...

	Keti Jurio	310	...	...	310	...	...			
	Rano	200	50	...	250	...	...			
	Nurketi	435	20	...	455	...	...			
	Butho	2,275	480	...	2,755	...	...			
	Manjhand	158	250	160	408	...	...	160 acres	opened to grazing.	
	Unarpur	1,465	550	...	1,855	...	...			
	Ghagh	160	20	60	180	...	...	60	do.	do.
	Khanote	603	400	...	945	...	...			
	Sekhat	20	30	500	50	...	...	500	do.	do.
	Matiari and Jakhri	1,870	220	...	1,590	...	...			
	Miani	885	125	...	1,010	...	...			
	Muhammad Khan	181	...	...	181	...	...			
	Kathri	50	10	...	60	...	...			
	Ghali	...	10	...	10	...	...			
	Shah Makai	43	...	...	43	...	...			
	Jamshoro	23	...	...	23	...	...			
	Total ...	11,500	3,365	720	14,145	...	...			
Jerruck ...	Mulchand	277	...	277	...	...	...	277	do.	do.
	Khadi	40	31	...	71	...	...			
	Penah	13	...	13	...	...	...	13	do.	do.
	Laikpur	147	...	147	...	...	...	147 acres disforested.		
	Viran	785	...	598	187	...	...	598 acres opened to grazing.		
	Jarko	...	...	...	...	...	...			
	Shah Louko	206	...	...	260	...	...			
	Sonda	200	40	...	240	...	...			
	Hilaya	228	...	228	...	...	...	228	do.	do.
	Khathar	60	...	...	60	...	...			
	Katiar	24	...	...	24	...	...			
	Bul-ka-Takur	107	...	...	107	...	...			
	Lalang	22	...	22	...	...	...	22	do.	do.
	Khokhur	...	40	...	40	...	...			
	Total ...	2,109	111	1,285	997	...	...			
	Total cultural operations... ..	20,848	6,505	3,104	24,249	...	...			
	Grand Total of regular and cultural operations. .	20,986	6,505	3,124	24,367	...	...			

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 57.

FOREST DEPARTMENT, SIND CIRCLE.—OUTTURN (IN CUBIC FEET) OF TIMBER AND FIREWOOD DURING THE FOREST YEAR 1892-93 AND AGENCY OF EXPLOITATION.

Divisions.	Timber in the rough logs.					Timber in the rough poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grant.	Right-holders.	Total.	Government.	Purchasers.	Free grant.	Right-holders.	Total.	Government.	Purchasers.	Free grant.	Right-holders.	Total.	Government.	Purchasers.	Free grant.	Right-holders.	Total.	Government.	Purchasers.	Free grant.	Right-holders.	Total.	Out-turn.
I.—Reserved Forests.																									
Sukkur	23,183	1,741	1,822	...	26,746	8,865	173	5	...	9,043	...	...	...	...	...	29,937	7,430	3,140	...	40,507	46,95,811	32,27,975	337	...	79,24,123	80,00,419
Naushahro	752	2,205	526	...	3,483	4,638	10,103	900	...	15,641	4,391	...	...	...	4,391	...	358	45	...	403	28,92,972	4,49,708	...	...	33,42,680	33,66,598
Hyderabad	952	1,827	...	...	2,779	70,776	11,539	487	...	82,802	19,081	2,000	543	...	21,624	2	270	...	...	272	48,68,576	3,96,076	608	...	52,65,260	53,72,737
Jerruck	18,452	1,461	473	...	20,386	5,259	5,948	250	...	11,457	10,800	...	...	...	10,800	...	203	3	...	206	31,29,658	24,833	...	...	31,54,491	31,97,340
Total ...	43,339	7,234	2,821	...	53,394	89,538	27,763	1,642	...	1,18,943	34,272	2,000	543	...	36,815	29,939	8,261	3,188	...	41,388	1,55,87,017	40,98,592	945	...	1,96,86,554	1,99,37,094
II.—Protected Forests.																									
Sukkur	...	95	...	...	95	...	15	...	...	15	...	...	...	...	...	145	...	...	...	145	...	...	...	...	...	255

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 58.

FORM No. 58.

FOREST DEPARTMENT, SIND CIRCLE.—Outturn of minor Forest produce.

Divisions.	Description of produce.	Produce removed or utilised										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
Sukkur	Ber fruit, &c.	Contract ...	10	...	...	...	...	...	...	...	10	
	Babul seed .. ..Maunds.	5	3	...	...	...	...	...	...	Mds. 5	3	
	Babul pods...	...	...	Contract...	757	...	...	...	...	Contract...	757	
	Munj and reed	...	...	Do. ...	924	...	...	...	...	Do. ...	924	
	Reed grass ... ...Bundles.	...	...	Bdles. 177	15	...	...	...	...	Bdles. 177	15	
	Kanh grass... ... ... Do.	...	...	Do. 180	14	Bdles. 711	44	...	...	Do. 891	58	
	Do. ... ...Cartloads.	...	...	Cart-loads. 14	9	...	...	...	...	Cart-loads. 14	9	
	Dabh grass... ... ...Maunds.	...	...	Mds. 4,357	272	...	...	...	...	Mds. 4,357	272	
	Kandi Branches ... ...Cartloads.	...	...	Cart-loads. 384	48	...	...	...	...	Cart-loads. 384	48	
	Compensation for damaging branches of trees	...	...	...	5	...	...	...	...	...	5	
	Jháu brushwood ... ...Bundles.	...	...	Bdles. 1,323	84	Bdles. 838	52	...	...	Bdles. 2,161	136	
	Tooth brushes ... ...Seers.	...	...	Seers. 5	1	...	...	...	...	Seers. 5	1	
	Grazing fees	...	...	...	20,041	...	...	...	...	...	20,041	
	Total... ...	...	13	...	22,170	...	96	...	...	...	22,279	
Naushahro...	Babul pods...	...	...	Contract...	2,717	...	...	...	...	Contract...	2,717	
	Ber fruit	...	...	Do. ...	16	...	...	...	...	Do. ...	16	
	Sar grass	...	...	Do. ...	1,099	...	...	...	...	Do. ...	1,099	
	Do. ... ...Bundles.	...	...	Bdles. 226	15	...	...	...	...	Bdles. 226	15	
	Jháu brushwood	...	...	Do. 1,039	66	Bdles. 30	2	...	...	Do. 1,069	68	
	Branches of trees	...	...	...	24	...	...	...	...	...	24	
	Babul leaves ... ...Maunds.	...	...	...	7	...	...	...	...	...	7	
	Grazing fees	...	...	...	11,819	...	...	...	...	...	11,819	
	Total... ...	...	...	...	15,763	...	2	...	...	...	15,765	

Hyderabad...	Babul bark... ... ...Maunds.	Mds.	1,129		524	Mds.	72		9	...		...		...	...	Mds.	1,201	533
	Tooth-brushes ... ... Do.	...		...		Do.	94		35	...		...		...	...	Do.	94	35
	Brushwood... ... ...Bundles.	...		...		Bdles.	1,908		119	Bdles.	292		18	...	...	Bdles.	2,200	137
	Kanh grass... ... ... Do.	...		...		Do.	1,259		79	Do.	16		1	...	...	Do.	1,275	80
	Do. ... ...Contract...	...		...		Contract...			218	...		...		...	...	Contract...		218
	Compensation on account for damage done to forests	...		...		...			239	...		...		...	...	...		239
	Lac ... ...Maunds.	...		...		Mds.	12		25	...		...		...	...	Mds.	12	25
	Do. ... ...Contract...	...		...		Contract...			8,067	...		...		...	...	Contract...		8,067
	Babul pods...	...		...		Do.	...		12,667	...		...		...	...	Do.	...	12,667
	Mangoes	...		...		Do.	...		920	...		...		...	...	Do.	...	920
	Kinro	...		...		Do.	...		28	...		...		...	...	Do.	...	28
	Sakun galls	...		...		Do.	...		15	...		...		...	...	Do.	...	15
	Honey	...		...		...			12	...		...		...	...	...		12
	Grazing fees	...		...		...			13,344	...		...		...	...	...		13,344
	Total... ...	...		524		...			35,777	...		19		...	...	...		36,320
Jerruck	Jháu brushwood ... ...Bundles.	...		...		Bdles.	1,440		90	...		...		...	...	Bdles.	1,440	90
	Potash ... ...Maunds.	...		...		Mds.	16		4	...		...		...	...	Mds.	16	4
	Do. ... ...Contract...	...		...		Contract...			29	...		...		...	...	Contract...		29
	Kanh grass... ... ... Do.	...		...		Do.	...		135	...		...		...	...	Do.	...	135
	Do. ... ...Bundles.	...		...		Bdles.	48		3	...		...		...	...	Bdles.	48	3
	Grass ... ...Contract...	...		...		Contract...			50	...		...		...	...	Contract...		50
	Fruit	...		...		Do.	...		277	...		...		...	...	Do.	...	277
	Lac	...		...		Do.	...		596	...		...		...	...	Do.	...	596
	Babul pods...	...		...		Do.	...		3,319	...		...		...	...	Do.	...	3,319
	Compensation	...		...		...			15	...		...		...	...	...		15
	Grazing fees	...		...		...			15,484	...		...		...	...	...		15,484
	Total... ...	...		...		...			20,002	...		...		...	...	...		20,002

Hyderabad,
12th October, 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 59.

FOREST DEPARTMENT, SIND CIRCLE.

Account of timber and other produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the year 1892-93.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
TIMBER.				
Balance at commencement of the year.				
Sale Depôts.				
Sukkur Division. Bahan logs and dasas	425	2,150		
Babul do. do.	235	695		
Tali do. do.	404	2,444		
Bahan posts	1,004			
Tali do.	52			
Babul do.	284			
Bahan rafters	13,565			
Babul cart axles	183			
			16,092	5,289
Forest Depôts.				
Bahan posts	900	...		
Bahan rafters	6,512	...		
			7,412	...
Sale Depôts.				
Naushahro Division. Babul logs	6	49		
Bahan posts	2	...		
			8	49
Forest Depôts.				
Bahan logs...	43	391		
Bahan do.	1	3		
Lai do.	1	2		
Kandi do.	1	4		
			46	400

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
TIMBER.				
Removed by purchasers from Depôts.				
Babul logs and dasas	3,123	37,172		
Bahan logs and dasas	2,111	1,[illegible]97		
Tali logs do. do.	1,007	7,1[illegible]		
Babul sleepers	305	...		
Babul posts	92[illegible]	...		
Babul rafters	2,20	...		
Babul bolsters	1,552	...		
Babul props	9,134	...		
Babul pieces	3	...		
Babul outer slabs	4	...		
Babul cart axles	188	...		
Bahan posts	19,23[illegible]	...		
Bahan rafters	183,7[illegible]	...		
Jhau posts	1,700	...		
Jhau rafters	8,019	...		
Tali posts	3[illegible]	...		
			233,295	53,261
Sold Locally.				
Bahan, babul and lai logs	211	1,535		
Do. do. do. pieces	29	...		
Babul logs	11[illegible]	1,371		
Bahan do.	3	4		

	Sale Depôts.						
Hyderabad Division.	Bahan logs	1	7				
	Babul logs	7	65				
	Babul log	1	...				
	Babul rafters	3,756	...				
	Bahan posts	2,048	...				
	Bahan rafters	19,109	...				
	Jhau posts	1,700	...				
	Jhau rafters	22,800	...				
	Babul outer slabs	17	...				
	Babul planks	1	...				
	Babul sleepers	64	...				
				49,495	72		
	Forest Depôts.						
	Babul sleepers	91	...				
	Babul pieces	7	...				
	Babul rafters	206	...				
				304	...		
	Sale Depôts.						
Jerruck. Division.	Babul logs	15	297				
				15	297		
	Forests Depôts.						
	Babul logs	19	38				
				19	38		
	Total balance ...	...	...	73,391	6,145		

Babul sleepers	621	...		
Babul props	4,024	...		
Bhan dasas	300	949		
Bahan posts	824	...		
Bahan rafters	1,616	...		
Jhau rafters	60	...	8,106	3,859
USED BY DEPARTMENT.				
Sale Depôts.				
Babul log	1	10		
Jhau rafters	157	...	158	10
Transferred from Forest to Sale Depôts.				
Bahan posts	900	...		
Bahan rafters	6,512	...	7,412	...
BALANCE AT CLOSE OF THE YEAR.				
Sale Depôts.				
Babul logs and dasas	932	5,869		
Bahan logs and dasas	1,805	7,223		
Tali do. do.	60	395		

Received from Forests in Sale Depôts.

Babul logs and dasas	4,146	41,670		
Bahan do. do.	3,487	16,009		
Tali do.	663	5,071		
Babul sleepers	700	...		
Babul posts	1,076	...		
Babul bolsters	1,565	...		
Babul props	14,119	...		
Babul pieces	3	...		
Babul outer slabs	24	...		
Babul cart axles	1,141	...		
Bahan posts	20,198	...		
Bahan rafters	186,067	...		
Jhau rafters	3,435	...	236,624	62,750

Received in Forest Depôts.

Bahan, babul and lai logs	211	1,535		
Do. do. do. pieces	298	...		
Babul logs	146	1,064		
Bahan logs	3	4		
Babul sleepers	536	...		
Babul props	4,024	...		
Bahan dasas	600	949		
Bahan posts	824	...		
Bahan rafters	8,116	...		

Sukkur Division.	Tali posts	19	...			
	Babul do.	431	...			
	Bhan posts	3,368	...			
	Bhan rafters	15,618	...			
	Jhau do.	1,459	...			
	Babul carts axles	1,136	...	24,828	13,487	
	Forest Depôts.					
	Bhan rafters	6,500	...			
	Bhan dasas	300	...	6,800	...	
	Sale Depôts.					
Naushahro Division.	Bahan logs	2	13	2	13	
	Forest Depôts.					
	Babul logs	14	84			
	Bahan do.	1	3			
	Lai log	1	2			
	Kandi do.	1	4	17	93	
	Sale Depôts.					
Division.	Babul logs	129	951			
	Babul log	1	... 7			
	Bahan log	1				
	Babul dasas	218	725			

Jhau do.	60	...	14,818	3,552								
otal Timber ...			324,833	72,447								
					Hyderabad	Babul sleepers	459	...				
						Babul bolster	1	...				
						Babul props...	4,985	...				
						Babul outer slabs	37	...				
						Babul post	1	...				
						Babul rafters...	1,556	...				
						Bahan posts	650	...				
						Bhan rafters	19,300	...				
						Jhau do.	16,600	...				
						Babul plank	1	...			43,939	1,683
						Forest Depôts.						
						Babul sleepers	6	...				
						Babul pieces	7	...				
						Babul rafters...	206	...				
						Babul logs	26	...			245	...
						Sale Depôts.						
					Jerruck Division.	Babul bolsters	12	...			12	...
						Forest Depôts.						
						Babul logs	19	38			19	
					Total Timber ...						324,833	72,447

FIREWOOD AND CHARCOAL.

BALANCE AT COMMENCEMENT OF THE YEAR.

Sukkur Division.	*Sale Depôts.*							
	Firewood	...	...	...	Mds.	32,131	...	32,131
	Locomotive fuel	...	...	...	C. ft.	...	10,921	10,921
	Forest Depôts.							
	Firewood	...	...	...	Mds.	6,706	...	6,706
	Locomotive fuel	...	...	...	C. ft.	...	3,202	3,202
Naushahro Division.	*Sale Depôts.*							
	Firewood	...	...	...	Mds.	300	...	300
	Forest Depôts.							
	Firewood	...	...	...	Mds.	5,539	...	...
	Locomotive fuel	...	...	...	C. ft.	...	1,00,600	1,00,600
	Babul seed	...	...	...	Mds.	9	...	5,548
Hyderabad Division.	*Sale Depôts.*							
	Firewood	...	...	...	Mds.	16,028	...	...
	Locomotive fuel	...	...	...	C. ft.	...	1,250	1,250
	Charcoal	...	...	...	Mds.	420	...	16,448
	Forest Depôts.							
	Firewood	...	...	...	Mds.	28,291	...	...
	Locomotive fuel	...	...	...	C. ft.	...	19,303	19,303
								28,291

FIREWOOD AND CHARCOAL.

	Removed by purchasers from Sale Depôts.							
	Firewood	...	...	...	Mds.	350,176	...	...
	Locomotive fuel	...	...	...	C. ft.	...	1,024,313	1,024,313
	Charcoal	...	...	...	Mds.	3,900	...	...
	Babul bark	...	...	...	,,	1,129	...	355,205
	Sold Locally.							
	Firewood	...	...	...	Mds.	98,852	...	...
	Locomotive fuel	...	...	...	C. ft.	...	9,070,569	9,070,569
	Charcoal	...	...	...	Mds.	55,622	...	...
	Babul and Sisso seed	...	...	...	,,	351	...	154,825
	Transferred to other Sale Depôts.							
	Firewood	...	...	...	Mds.	3,179	...	3,179
	WRITTEN OFF. *Sale Depôts.*							
	Firewood	...	...	...	Mds.	1,628	...	1,628
	Forest Depôts.							
	Firewood	...	...	...	Mds.	5,818	...	...
	Charcoal	...	...	...	,,	186	...	...
	Locomotive fuel	...	...	...	C. ft.	...	38,470	38,470
	Babul seed	...	...	...	Mds.	60	...	6,064
	Transferred to Sale Depôts.							
	Firewood	...	...	...	Mds.	25,582	...	...
	Locomotive fuel	...	...	...	C. ft.	...	5,567	5,567
	Used by Department.							
	Babul seed	...	...	...	Mds.	408	...	...
	Kandi seed	...	...	...	,,	9	...	417

											BALANCE AT CLOSE OF THE YEAR.				
		Sale Depôts.									*Sale Depôts.*				
Jerruck Division.	Firewood	...	...	...	Mds.	1,250	...			Sukkur Division.	Firewood	...	... Mds.	7,191	...		
	Charcoal	...	...	...	„	13	...				Locomotive fuel	...	.. C. ft.	...	47,501		
								1,263	...							7,191	47,501
		Forest Depôts.									*Forest Depôts.*				
	Firewood	...	...	...	Mds.	14,362	...				Firewood	...	... Mds.	13,181	...		
	Locomotive fuel		...	...	C. ft.	...	1,03,026				Locomotive fuel	...	... C. ft.	...	3,24,727		
	Charcoal	...	...	...	Mds.	1,497	...				Babul and Sissoo seed		... Mds.	92	...		
								15,859	1,03,026							13,273	3,24,727
				Total Balance...				1,06,546	2,38,302								
		Received from Forest in Sale Depôts.									*Sale Depôts.*				
	Firewood ...		...	...	Mds.	3,38,783	...			Naushahro Division.	Firewood	...	... Mds.	...	...		
	Locomotive fuel		...	...	C. ft.	...	10,65,911										
	Charcoal ...		...	...	Mds.	3,747	...				*Forest Depôts.*				
	Babul bark	...	...	...	„	1,129	...				Firewood	...	... Mds.	4,696	...		
								3,43,659	10,65,911		Babul seed	...	... „	159	...		
																4,855	...
		Received in Forest Depôts.									*Sale Depôts.*				
	Firewood ...		...	...	Mds.	1,18,256	...			Hyderabad Division.	Firewood	...	... Mds.	28,497	...		
	Locomotive fuel		...	...	C. ft.	...	94,79,636				Locomotive fuel	...	... C. ft.	...	6,268		
	Charcoal ...		...	...	Mds.	56,935	...				Charcoal	...	... Mds.	267	...		
	Babul and Sissoo seed		...	...	„	1,319	...									28,764	6,268
	Kandi seed	...	...	...	„	22	...				*Forest Depôts.*				
								1,76,532	94,79,636		Firewood	...	... Mds.	4,487	...		
											Locomotive fuel	...	... C. ft.	...	39,499		
		Received by transfer in Sale Depôts.														4,487	39,499
	Firewood ...		...	...	Mds.	3,179	...				*Sale Depôts.*				
								3,179	...	Jerruck Division.	Firewood	...	... Mds.	1,000	...		
											Charcoal	...	... „	13	...		
																1,013	
											Forest Depôts.				
											Firewood	...	... Mds.	20,538	...		
											Locomotive fuel	...	... C. ft.	...	2,26,935		
											Charcoal	...	... Mds.	2,624	...		
											Babul seed	...	... „	258	...		
											Kandi seed	...	... „	13	...		
																23,433	2,26,935
				Total ...		...	...	6,29,916	1,07,83,849				Total ...	...	...	6,29,916	1,07,83,849

Hyderabad,
12th October, 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 60.

FOREST DEPARTMENT, SIND CIRCLE.

Abstract showing the value of timber and other produce at Sale Depôts for the year 1892-93.

	Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favor of the year.	Against the year.
Sukkur Division.	*Sale Depôts.*								
	Bahan logs and dasas	425	2,150	1,075	1,805	7,223	3,612	...	...
	Babul logs and dasas	235	695	347	932	5,869	2,935	...	...
	Tali logs and dasas	404	2,444	1,222	60	395	197	...	...
	Bahan posts	1,004	...	321	3,368	...	1,078	...	...
	Babul posts	284	...	91	431	...	138	...	...
	Bahan rafters	13,505	...	1,956	15,618	...	2,265	...	...
	Babul cart axles	183	...	68	1,136	...	426	...	...
	Tali posts	52	...	17	19	...	5	...	...
	Jhau rafters	...	...	...	1,459	...	88	...	...
	Total	16,092	5,289	5,097	24,828	13,487	10,744	5,647	...
	Forest Depôts.								
	Bhan posts	900	...	225	...	...	...	...	...
	Bhan rafters	6,512	...	781	6,500	...	780	...	...
	Bhan dasas	...	...	...	300	...	270	...	...
	Total	7,412	...	1,006	6,800	...	1,050	44	...
	Sale Depôts.								
	Firewood ..... Mds.	32,131	...	5,784	7,191	...	1,294	...	...
	Locomotive fuel ..... C. ft.	...	10,921	421	...	47,501	1,948	...	...
	Total	32,131	10,921	6,205	7,191	47,501	3,242	...	2,963
	Forest Depôts.								
	Firewood ..... Mds.	6,706	...	805	13,181	...	1,582	...	...
	Locomotive fuel ..... C. ft.	...	3,202	64	...	324,727	8,843	...	...
	Babul and Sisso seed	...	...	...	92	...	46	...	...
	Total	6,706	3,202	869	13,273	324,727	10,471	9,602	...
Naushahro Division.	*Sale Depôts.*								
	Bahan logs	6	49	25	2	13	4	...	...
	Bahan posts	2	...	1	...	...	...	...	...
	Total	8	49	26	2	13	4	...	22
	Forest Depôts.								
	Babul logs	43	391	71	14	84	14	...	...
	Bahan logs	1	3	1	1	3	1	...	...
	Jhau logs	1	2	1	1	2	1	...	...
	Kandi logs	1	4	1	1	4	1	...	...
	Total	46	400	74	17	93	17	...	57
	Sale Depôts.								
	Firewood ..... Mds.	300	...	72	...	...	...	...	72
	Forest Depôts.								
	Firewood ..... Mds.	5,539	...	977	4,696	...	845	...	...
	Locomotive fuel ..... C. ft.	....	100,600	3,521	...	...	...	...	...
	Babul seed ..... Mds.	9	...	9	159	...	159	...	...
	Total	5,548	100,600	4,507	4,855	...	1,004	...	3,503

	Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favor of the year.	Against the year.
Hyderabad Division.	*Sale Depôts.*								
	Babul logs	7	65	32	129	951	425	...	...
	Do.	1	...	1	1	...	1	...	...
	Bahan logs	1	7	3	1	7	3	...	...
	Bahan posts	2,048	...	410	650	...	260	...	...
	Bahan rafters	19,100	...	1,910	19,300	...	2,316	...	...
	Jháu posts	1,700	...	85	...	...	...	...	...
	Babul slabs	17	...	4	37	...	9	...	...
	Babul planks	1	...	2	1	...	2	...	...
	Babul rafters	3,756	...	751	1,556	...	187	...	...
	Jháu rafters	22,800	...	912	16,600	...	664	...	...
	Babul sleepers	64	...	64	459	...	1,262	...	...
	Babul dasas	...	...	...	218	725	362	...	...
	Babul bolsters	...	...	...	1	...	2	...	...
	Babul props	...	...	...	4,985	...	1,495	...	...
	Babul posts	...	...	...	1	...	1	...	...
	Total	49,495	72	4,174	43,939	1,683	6,989	2,815	...
	Forest Depôts.								
	Babul sleepers	91	...	182	6	...	12	...	...
	Babul pieces	7	...	1	7	...	1	...	...
	Babul rafters	206	...	31	206	...	31	...	...
	Babul logs	...	...	...	26	...	52	...	...
	Total	304	...	214	245	...	96	...	118
	Sale Depôts.								
	Firewood ....Mds.	16,028	...	2,885	28,497	...	5,129	...	...
	Locomotive fuel ....C. ft.	...	1,250	52	...	6,268	263	...	...
	Charcoal ....Mds.	420	...	235	267	...	167	...	...
	Total	16,448	1,250	3,172	28,764	6,268	5,559	2,387	...
	Forest Depôts.								
	Firewood ....Mds.	28,291	...	2,829	4,487	...	449	...	...
	Locomotive fuel .... C. ft.	...	19,303	444	...	39,499	908	...	...
	Total	28,291	19,303	3,273	4,487	39,499	1,357	...	1,916
Jerruck Division.	*Sale Depôts.*								
	Babul logs	15	297	446	...	...	...	...	...
	Babul bolster	...	...	...	12	...	60	...	...
	Total	15	297	446	12	...	60	...	386
	Forest Depôts.								
	Babul logs	19	38	5	19	38	5	...	...
	Sale Depôts.								
	Firewood ....Mds.	1,250	...	225	1,000	...	180	...	...
	Charcoal ....Mds.	13	...	13	13	...	13	...	...
	Total	1,263	...	238	1,013	...	193	...	45
	Forest Depôts.								
	Firewood ....Mds.	14,362	...	1,723	20,538	...	2,465	...	...
	Locomotive fuel .... C. ft.	...	103,026	2,176	...	226,935	4,546	...	...
	Charcoal ....Mds.	1,497	...	539	2,624	...	945	...	...
	Babul seed	...	...	...	258	...	129	...	...
	Kandi seed	...	...	...	13	...	6	...	...
	Total	15,859	103,026	4,438	23,433	226,935	8,091	3,653	...

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 61.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.

Summary of Revenue and Expenditure of the different Divisions during the year 1892-93.

BUDGET HEADS.	Direction.	Hyderabad Division.	Naushahro Division.	Sukkur Division.	Jerruck Division.	Total for 1892-93.	Total Budget Estimate.
REVENUE.							
TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—							
a. Timber	...	27,799 15 3	4,878 13 10	18,870 4 4	32,322 11 7	83,871 13 0	80,000 0 0
b. Firewood and charcoal	...	1,33,414 7 6	93,053 0 6	1,76,243 11 4	53,745 1 10	4,56,456 5 2	5,16,900 0 0
c. Grass and other minor produce	...	523 15 7	...	12 8 0	0 4 0	536 11 7	900 0 0
TOTAL I ...	...	1,61,738 6 4	97,931 14 4	1,95,126 7 8	86,068 1 5	5,40,864 13 9	5,97,800 0 0
TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—							
a. Timber	...	2,273 12 9	760 5 3	2,021 3 6	774 9 3	5,829 14 3	7,700 0 0
b. Firewood and charcoal	...	4,485 5 2	3,303 10 6	23,971 1 9	554 0 6	32,374 1 11	29,700 0 0
d. Grazing and fodder grass	...	10,585 11 0	9,254 15 0	16,909 4 8	12,220 1 6	48,970 0 2	57,000 0 0
e. Other minor produce	...	18,110 0 10	2,750 0 0	1,333 10 0	2,476 0 1	24,669 10 11	19,700 0 0
TOTAL II ...	...	35,454 13 9	16,128 14 9	44,235 3 5	16,024 11 4	1,11,843 11 3	1,14,100 0 0
III. DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	...	...	12 10 11	...	12 10 11	...
TOTAL III ...	...	...	...	12 10 11	...	12 10 11	...
V. MISCELLANEOUS—							
a. Fines and forfeitures...	...	19 7 9	...	...	...	19 7 9	...
b. Refunds	...	0 8 0	...	...	411 1 10	411 9 10	...
c. Other sources	...	5,115 6 9	9,580 4 2	10,639 12 2	2,735 3 8	28,070 10 9	22,700 0 0
TOTAL V ...	...	5,135 6 6	9,580 4 2	10,639 12 2	3,146 5 6	28,501 12 4	22,700 0 0
GRAND TOTAL REVENUE... ...	...	2,02,328 10 7	1,23,641 1 3	2,50,014 2 2	1,05,239 2 3	6,81,223 0 3	7,34,600 0 0
EXPENDITURE.							
A—Conservancy and Works.							
I. TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—							
a. Timber	...	10,809 2 0	3,132 8 10	7,958 0 9	23,104 11 7	45,004 7 2	33,500 0 0
b. Firewood and charcoal	...	91,978 15 9	58,645 11 6	1,19,870 6 2	32,533 5 5	3,03,028 6 10	3,53,485 0 0
c. Grass and other minor produce	...	183 14 0	...	...	596 5 5	780 3 5	500 0 0
TOTAL A I ...	...	1,02,971 15 9	61,778 4 4	1,27,828 6 11	56,234 6 5	3,48,813 1 5	3,87,485 0 0
II. TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS	...	23 6 0	147 15 6	...	...	171 5 6	600 0 0
TOTAL A II ...	...	23 6 0	147 15 6	...	...	171 5 6	600 0 0
III DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	...	...	1 4 4	...	1 4 4	...
TOTAL A III ...	...	...	...	1 4 4	...	1 4 4	...
VI. LIVE STOCK, STORES, TOOLS AND PLANT—							
a. Purchase of cattle	...	130 0 0	...	...	...	130 0 0	300 0 0
b. Feed and keep of cattle	...	4 7 6	...	81 0 0	0 12 0	85 3 6	300 0 0
c. Purchase of stores, tools and plant ...	67 12 0	4,997 15 0	...	63 2 9	276 6 0	5,405 3 9	300 0 0
TOTAL A VI ...	67 12 0	5,132 6 6	...	143 2 9	277 2 0	5,620 7 3	900 0 0
VII. COMMUNICATIONS AND BUILDINGS—							
a. Roads and bridges	...	...	...	...	...	...	49 1 0
b. Buildings	...	176 6 6	41 0 0	238 4 0	70 10 0	526 4 6	1,550 0 0
c. Other works	...	...	...	2 4 0	...	2 4 0	0 15 0
TOTAL A VII ...	...	176 6 5	41 0 0	240 8 0	70 10 0	528 8 6	1,600 0 0
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—							
a. Demarcation	...	728 5 9	33 4 0	...	1 4 0	762 13 9	650 0 0
c. Surveys	...	365 7 0	327 6 2	1,035 13 6	983 3 10	2,711 14 6	3,900 0 0
e. Sowing and planting	...	930 0 4	18 11 0	1,957 7 4	489 7 5	3,395 10 1	3,700 0 0
f. Protection from fire	...	...	...	...	...	...	765 0 0
g. Other works	...	1,055 3 7	449 2 7	75 0 0	531 4 10	2,110 11 0	20,065 0 0
TOTAL A VIII ...	...	3,079 0 8	828 7 9	3,068 4 10	2,005 4 1	8,981 1 4	28,415 0 0
IX. MISCELLANEOUS—							
c. Other charges	...	476 1 0	458 8 0	965 8 0	472 6 0	2,372 7 0	3,000 0 0
TOTAL A IX ...	...	476 1 0	458 8 0	965 8 0	472 6 0	2,372 7 0	3,000 0 0
TOTAL A. CONSERVANCY AND WORKS ...	67 12 0	1,11,859 4 5	63,254 3 7	1,32,247 2 10	59,059 12 6	3,66,488 3 4	4,22,000 0 0
B—Establishments.							
1. SALARIES—							
a. Conservators	1,000 0 0	...	...	...	...	1,000 0 0	...
b. Superior Officers	9,900 0 0	4,050 0 0	6,527 6 8	5,112 7 11	4,506 15 3	30,096 13 10	32,000 0 0
c. Subordinate Forest and Depot Establishments..	...	8,899 12 4	7,264 4 6	15,628 15 3	5,754 4 6	37,547 4 7	37,900 0 0
d. Office Establishments	3,568 3 10	1,545 8 10	1,276 15 6	1,678 15 8	1,378 6 4	9,388 2 2	9,432 0 0
e. Deputation and Special Allowances ...	270 10 8	...	...	...	...	270 10 8	364 0 0
TOTAL B I ...	14,678 14 6	14,495 5 2	15,068 10 8	22,420 6 10	11,639 10 1	78,302 15 3	79,696 0 0
I. TRAVELLING ALLOWANCES—							
a. Conservators	200 0 0	...	...	...	...	200 0 0	...
b. Superior Officers	1,805 12 11	1,200 0 0	2,076 9 3	1,884 12 5	1,670 0 8	8,697 3 3	7,800 0 0
c. Subordinate Forest and Depot Establishments..	...	825 8 11	632 14 5	1,220 8 8	520 0 9	3,199 0 9	3,110 0 0
d. Office Establishments	1,248 3 7	566 14 3	416 12 6	783 7 11	451 13 3	3,467 3 6	3,290 0 0
TOTAL B II ...	3,314 0 6	2,592 7 2	3,126 4 2	3,888 13 0	2,641 14 8	15,563 7 6	14,200 0 0
III. CONTINGENCIES—							
a. Stationery	25 15 0	84 8 0	139 2 11	196 4 1	65 8 9	510 6 9	614 0 0
b. Carriage of Tents and Records	330 14 9	129 4 0	121 9 0	150 3 0	122 10 5	854 9 2	888 3 0
c. Rents, Rates and Taxes	321 9 10	240 0 0	240 0 0	105 8 7	138 6 6	1,045 8 11	1,178 0 0
e. Official Postage	111 11 0	264 9 0	275 9 0	634 1 0	170 10 0	1,396 8 0	1,444 1 0
f. Sundries...	431 7 10	163 10 4	121 6 1	210 11 10	164 3 0	1,091 7 1	1,879 12 0
TOTAL B III ...	1,221 10 5	821 15 4	896 11 0	1,296 12 6	661 6 8	4,898 7 11	6,004 0 0
TOTAL B. ESTABLISHMENTS ...	19,214 9 5	17,909 11 8	19,091 9 10	27,606 0 4	14,942 15 5	98,764 14 8	99,900 0 0
GRAND TOTAL OF EXPENDITURE ...	19,282 5 5	1,29,769 0 1	82,345 13 5	1,59,853 3 2	74,002 11 11	4,65,253 2 0	5,21,900 0 0

No. F. / 12948

Forwarded to the Conservator of Forests, Sind Circle, under Section 268 of the Forest Department Code.

Bombay, Accountant General's Office,
Dated 5th August, 1893.

A. F. COX,
Accountant General.

FORM No. 61.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.

Summary of Revenue and Expenditure of the different Divisions during the Forest year extending from 1st April 1892 to 30th June 1893.

BUDGET HEADS.	Direction.	Hyderabad Division.	Naushahro Division.	Sukkur Division.	Jerruck Division.	Total for the Forest year.
REVENUE.						
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—						
a. Timber	...	30,104 15 10	4,878 13 10	23,131 9 6	37,948 9 7	96,064 0 9
b. Firewood and charcoal	...	1,48,613 2 6	1,00,653 7 10	1,96,108 3 11	62,496 9 4	5,07,871 7 7
c. Grass and other minor produce	...	523 15 7	...	12 8 0	0 4 0	536 11 7
TOTAL I ...	...	1,79,242 1 11	1,05,532 5 8	2,19,252 5 5	1,00,445 6 11	6,04,472 3 11
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS—						
a. Timber	...	2,596 1 6	1,021 2 4	2,293 13 7	811 5 9	6,722 7 2
b. Firewood and charcoal	...	5,483 12 5	4,162 11 9	31,258 12 7	622 2 6	41,527 7 3
d. Grazing and fodder grass	...	13,343 9 0	11,818 8 0	20,041 1 11	15,484 2 6	60,687 5 5
e. Other minor produce	...	22,433 5 10	3,944 9 0	2,129 0 0	4,518 4 1	33,025 2 11
TOTAL II ...	...	43,856 12 9	20,946 15 1	55,722 12 1	21,435 14 10	1,41,962 6 9
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	...	40 0 0	12 10 11	...	52 10 11
TOTAL III ...	...	...	40 0 0	12 10 11	...	52 10 11
V.—MISCELLANEOUS—						
a. Fines and forfeitures...	...	19 7 9	...	...	...	19 7 9
b. Refunds	...	0 8 0	...	...	411 4 4	411 12 4
c. Other sources	...	6,950 7 9	14,788 6 2	19,580 8 10	2,792 11 10	44,112 2 7
TOTAL V ...	...	6,970 7 6	14,788 6 2	19,580 8 10	3,204 0 2	44,543 6 8
GRAND TOTAL REVENUE... ...	...	2,30,069 6 2	1,41,307 10 11	2,94,568 5 3	1,25,085 5 11	7,91,030 12 3
EXPENDITURE.						
A—Conservancy and Works.						
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—						
a. Timber	...	15,077 0 9	3,132 8 10	8,126 11 0	29,911 13 10	56,248 2 5
b. Firewood and charcoal	...	1,08,575 9 9	66,454 6 4	1,27,710 5 1	37,941 11 6	3,40,772 0 8
c. Grass and other minor produce	...	184 1 6	...	...	596 5 5	780 6 11
TOTAL A I ..	...	1,23,836 12 0	69,676 15 2	1,35,837 0 1	68,449 14 9	3,97,800 10 0
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS	...	58 13 0	198 15 6	...	0 11 3	258 7 9
TOTAL A II ..	...	58 13 0	198 15 6	...	0 11 3	258 7 9
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE	...	...	...	1 4 4	...	1 4 4
TOTAL A III ...	...	...	...	1 4 4	...	1 4 4
VI.—LIVE STOCK, STORES, TOOLS AND PLANT—						
a. Purchase of cattle	...	130 0 0	...	...	...	130 0 0
b. Feed and keep of cattle	...	4 7 6	...	91 0 0	0 12 0	96 3 6
c. Purchase of stores, tools and plant	67 12 0	4,997 15 0	...	67 8 9	350 10 6	5,483 14 3
TOTAL A VI ...	67 12 0	5,132 6 6	...	158 8 9	351 6 6	5,710 1 9
VII.—COMMUNICATIONS AND BUILDINGS—						
b. Buildings	...	176 6 6	66 0 0	250 4 2	70 10 0	563 4 8
c. Other works	...	...	...	2 10 0	2 4 0	4 14 0
TOTAL A VII ..	...	176 6 5	66 0 0	252 14 2	72 14 0	568 2 8
VIII.—DEMARCATION, IMPROVEMENT, AND EXTENSION OF FORESTS—						
a. Demarcation	...	2,031 5 8	33 4 0	5 0 0	1 4 0	2,070 13 8
c. Surveys	...	365 7 0	327 6 2	1,216 11 6	1,281 15 10	3,191 8 6
d. Working plans...	...	30 0 0	...	...	...	30 0 0
e. Sowing and planting	...	1,164 12 4	18 11 0	1,957 7 4	576 6 3	3,717 4 11
f. Protection from fire	...	...	...	463 4 0	...	463 4 0
g. Other works	...	1,404 11 7	562 0 10	75 0 0	736 9 6	2,778 5 11
TOTAL A VIII ..	...	4,996 4 7	941 6 0	3,717 6 10	2,596 3 7	12,251 5 0
IX.—MISCELLANEOUS—						
a. Refunds	...	...	...	...	640 0 0	640 0 0
c. Other charges	...	374 14 0	359 1 0	755 13 9	415 8 0	1,905 4 9
TOTAL A IX ...	...	374 14 0	359 1 0	755 13 9	1,055 8 0	2,545 4 9
TOTAL A. CONSERVANCY AND WORKS ..	67 12 0	1,34,575 8 7	71,242 5 8	1,40,722 15 11	72,526 10 1	4,19,135 4 3
B.—Establishments.						
I.—SALARIES—						
a. Conservators	1,000 0 0	...	...	...	...	1,000 0 0
b. Superior Officers	12,600 0 0	5,257 2 3	8,477 6 8	5,862 7 11	7,326 15 3	39,524 0 1
c. Subordinate Forest and Depot Establishments..	...	11,121 4 4	9,119 13 0	10,655 5 1	7,030 14 3	46,918 4 8
d. Office Establishments	4,385 8 0	1,910 9 11	1,905 0 0	2,044 7 11	1,731 13 10	11,977 7 8
e. Deputation and Special Allowances	270 10 8	...	...	...	...	270 10 8
TOTAL B I ...	18,256 2 8	18,289 0 6	19,193 3 8	27,562 4 11	16,089 11 4	99,390 7 1
II.—TRAVELLING ALLOWANCES—						
a. Conservators	200 0 0	...	...	...	...	200 0 0
b. Superior Officers	2,630 4 11	1,500 0 0	2,706 9 3	2,184 12 5	2,120 0 8	11,141 11 3
c. Subordinate Forest and Depot Establishments.	...	1,028 5 11	791 4 11	1,554 3 2	612 5 3	3,986 3 3
d. Office Establishments	1,530 4 0	693 6 1	550 4 9	926 8 11	556 13 3	4,262 5 0
TOTAL B II ...	4,360 8 11	3,226 12 0	4,048 2 11	4,665 8 6	3,289 3 2	19,590 3 6
III.—CONTINGENCIES—						
a. Stationery	30 13 6	106 14 0	161 8 11	405 9 4	82 14 9	787 12 6
b. Carriage of Tents and Records	377 1 9	172 9 8	169 3 9	171 3 0	157 6 11	1,047 9 1
c. Rents, Rates and Taxes	411 9 10	309 0 0	309 0 0	117 8 7	198 6 6	1,327 8 11
e. Official Postage	171 15 0	284 13 0	331 3 0	735 10 6	221 1 6	1,744 11 0
f. Sundries...	503 4 10	188 7 3	142 11 6	280 1 5	133 9 0	1,308 2 4
TOTAL B III ...	1,494 12 11	1,052 11 11	1,104 11 6	1,719 0 10	853 6 8	6,215 11 10
TOTAL B. ESTABLISHMENTS ...	24,111 8 6	22,568 8 5	24,346 2 1	33,937 14 3	20,232 5 2	1,25,196 6 5
GRAND TOTAL OF EXPENDITURE ...	24,179 4 6	1,57,144 1 0	95,588 7 9	1,74,660 14 2	92,758 15 3	5,44,331 10 8

Office, of the Accountant General Bombay,
Dated September, 1893.

A. F. COX,
Accountant General.

FORM No. 62.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.—ANNUAL ACCOUNT CURRENT FOR THE YEAR 1892-93.

	Rs. a. p.	Rs. a. p.
To opening Balance	...	83 13 0
VIII—Assessed Taxes—Income Tax—		
Deductions by Government from Salaries and Pensions	...	961 14 8
IX—Forest (as per summary)	...	6,81,223 0 3
Revenue Deposits, (Forest)	...	1,820 4 0
Cheques and Bills, (Departmental Cheques), Forest	...	4,98,319 7 9
Advances Recoverable —		
Forest Advances	1,81,091 8 9	...
Objection Book Advances	266 10 8	1,81,358 3 5
Cash recoveries	...	2,430 4 0
Forest Remittances—		
Remittances to Treasuries	13 0 6	...
Inter-Divisional Transfers	26,327 13 5	...
Inter-Departmental Transfers	112 4 10	26,453 2 9
BOMBAY UNCOVENANTED SERVICE F. P. FUND—		
Widows' Branch	...	721 6 6
Account between Bombay and Military, Bombay—		
IV. Miscellaneous Receipts	...	162 14 4
Account between Bombay and Public Works Department, Bombay—		
IV. Payments into Treasuries by Civil Officers on account of Public Works Department	...	680 0 1
Total Rs ...	...	13,94,214 6 9

	Rs. a. p.	Rs. a. p.
1. Refunds and Drawbacks—Refunds—		
Divided Heads, Forest	...	4 12 0
11. Forest (as per summary)	...	4,05,253 2 0
19. Law and Justice—		
Jails, District Jails, Contingencies, ...	...	553 15 8
Revenue Deposits (Forests)	...	1,560 15 0
Cheques and Bills (Forests Cheque cancelled)	...	229 8 0
Advances Recoverable—		
Forest advances	2,10,380 13 8	2,10,380 13 8
Cash Recoveries	...	2,430 4 0
Forest Remittances—		
Remittances to Treasuries	2,83,186 3 10	...
Inter-Divisional Transfers	26,077 14 9	3,09,264 2 7
Accounts Current—		
Account between Bombay and Millitary Bengal Western Circle—		
Miscellaneous	...	37,030 3 10
Account between Bombay and Military, Bombay—		
IV. Items adjustable by Military	...	42,863 11 4
Account between Bombay and P. W. D., Bombay—(Ordinary Branches)—		
IV.—Items adjustable by P. W. D.	...	8,135 9 2
Account between Bombay and P. W. D., (Railway Branches) N. W. Railway—		
IV. Items adjustable by P. W. D.	...	3,15,539 7 10
Do. do. Hyderabad-Umarkot Railway ..	...	298 3 2
Closing Balances	...	69 10 6
Total Rs..	...	13,94,214 6 9

No. F. / 12949.

Forwarded to the Deputy Conservator of Forests, Sind Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 5th August 1893.

A. F. COX
Accountant General.

FORM No. 62.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.—ANNUAL ACCOUNT CURRENT FOR THE FOREST YEAR EXTENDING FROM THE 1ST APRIL 1892 TO 30TH JUNE 1893.

	Rs. a. p.	Rs. a. p.
To opening Balance	...	83 13 0
VIII—Assessed Taxes—Income Tax—		
Deductions by Government from Salaries and Pensions	...	1,252 13 4
IX—Forest (as per summary)	...	7,91,030 12 3
Revenue Deposits, (Forest)	...	2,741 9 4
Cheques and Bills (Departmental Cheques), Forest	...	6,48,353 1 9
Advances Recoverable—		
Forest Advances	2,13,423 11 6	...
Objection Book Advances	266 10 8	2,13,690 6 2
Cash recoveries	...	2,922 0 3
Forest Remittances—		
Remittances to Treasuries	13 0 6	...
Inter-Divisional Transfers	26,327 13 5	...
Inter-Departmental Transfers	112 4 10	26,453 2 9
BOMBAY UNCOVENANTED SERVICE F. P. FUND—		
Widows' Branch	...	961 14 0
Account between Bombay and Military Bombay—		
IV. Miscellaneous Receipts	...	162 14 4
Account between Bombay and Public Works Department, Bombay—		
IV. Payments into Treasuries by Civil Officers on account of Public Works Department	...	761 0 1
Total Rs	...	16,88,413 7 3

	Rs. a. p.	Rs. a. p.
1. Refunds and Drawbacks—Refunds—		
Divided Heads, Forest	...	40 14 0
11. Forest (as per summary)	...	5,44,331 0 8
19. Law and Justice—		
Jails, District Jails, Contingencies,	...	628 13 8
Revenue Deposits (Forests)	...	2,462 10 0
Cheques and Bills (Forests Cheque cancelled)	...	675 8 0
Advances Recoverable—		
Forest advances	3,12,749 2 4	...
		3,12,749 2 4
Cash Recoveries	...	2,922 0 3
Forest Remittances—		
Remittances to Treasuries	3,50,703 4 1	...
Inter-Divisional Transfers	26,077 14 9	...
		3,76,781 2 10
Accounts Current—		
Account between Bombay and Military Bengal Western Circle—		
Miscellaneous	...	37,630 3 10
Account between Bombay and Military, Bombay—		
IV. Items adjustable by Military	...	47,716 9 6
Account between Bombay and P. W. D., Bombay—(Ordinary Branches)—		
IV.—Items adjustable by P. W. D.	...	9,428 1 0
Account between Bombay and P. W. D., (Railway Branch) N. W. Railway—		
IV. Items adjustable by P. W. D.	...	3,53,128 2 9
Do. do. Hyderabad-Umarkot Railway	...	298 3 2
Closing Balance	...	217 5 3
Total Rs	...	16,88,413 7 3

No. F. 16176.

Forwarded to the Deputy Conservator of Forests, Sind Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 8th September 1893.

A. F. COX,
Accountant General.

FORM No. 63.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1892-93.

Divisions.	Particulars.	Outstandings at commencement of year.	Value of Sales and other Revenue during year.	Total.	Amount realized during the year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Sukkur ...	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	44 6 2	23,087 3 4	23,131 9 6	23,131 9 6	.....	
	(b) Firewood and charcoal	7,155 0 4	1,89,551 2 3	1,96,706 2 7	1,96,108 3 11	597 14 8	
	(e) Grass and other minor produce	.....	12 8 0	12 8 0	12 8 0	.....	The outstanding under VC. at the close of the year amounts to Rs. 139-0-1.
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	2,301 13 7	2,301 13 7	2,293 13 7	8 0 0	
	(b) Firewood and charcoal	.....	31,258 12 7	31,258 12 7	31,258 12 7	.....	
	(d) Grazing and fodder grass	.....	20,041 1 11	20,041 1 11	20,041 1 11	.....	
	(e) Other minor produce	.....	2,199 11 0	2,199 11 0	2,129 0 0	70 11 0	
	III.—Confiscated, drift and waif wood	.....	12 10 11	12 10 11	12 10 11	.....	
	Total...	7,199 6 6	2,68,464 15 7	2,75,664 6 1	2,74,987 12 5	676 9 8	
Naushahro	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	4,878 13 10	4,878 13 10	4,878 13 10	.....	
	(b) Firewood and charcoal	.....	1,00,653 7 10	1,00,653 7 10	1,00,653 7 10	.....	
	(e) Grass and other minor produce	.....	.....	.....	.....	.....	The outstanding under VC. at the close of the year amounts to Rs. 344-0-0.
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	1,021 2 4	1,021 2 4	1,021 2 4	.....	
	(b) Firewood and charcoal	.....	4,162 11 9	4,162 11 9	4,162 11 9	.....	
	(d) Grazing and fodder grass	.....	11,818 8 0	11,818 8 0	11,818 8 0	.....	
	(e) Other minor produce	.....	3,944 9 0	3,944 9 0	3,944 9 0	.....	
	III.—Confiscated, drift and waif wood	.....	40 0 0	40 0 0	40 0 0	.....	
	Total...	.....	1,26,519 4 9	1,26,519 4 9	1,26,519 4 9	.....	

Hyderabad	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	275 0 0	30,670 3 8	30,945 3 8	30,104 15 10	840 3 10	
	(b) Firewood and charcoal	1,890 4 10	1,62,538 14 11	1,64,429 3 9	1,48,613 2 6	15,816 1 3	
	(e) Grass and other minor produce	.....	523 15 7	523 15 7	523 15 7	.....	
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	2,596 1 6	2,596 1 6	2,596 1 6	.....	
	(b) Firewood and charcoal	.....	5,483 12 5	5,483 12 5	5,483 12 5	.....	
	(d) Grazing and fodder grass	.....	13,343 9 0	13,343 9 0	13,343 9 0	.....	
	(e) Other minor produce	.....	22,433 5 10	22,433 5 10	22,433 5 10	.....	
	III.—Confiscated, drift and waif wood	.....	.....	.....	.....	.....	
	Tota'...	2,165 4 10	2,37,589 14 11	2,39,755 3 9	2,23,098 14 8	16,656 5 1	
Jerruck ...	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	37,948 9 7	37,948 9 7	37,948 9 7	.....	
	(b) Firewood and charcoal	17 0 0	63,388 14 11	63,405 14 11	62,496 9 4	892 5 7	
					*17 0 0		
	(e) Grass and other minor produce	.....	17 11 0	17 11 0	0 4 0	17 7 0	
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	811 5 9	811 5 9	811 5 9	.....	
	(b) Firewood and charcoal	.....	622 2 6	622 2 6	622 2 6	.....	
	(d) Grazing and fodder grass	3 4 0	15,484 2 6	15,487 6 6	15,484 2 6	.....	
					*3 4 0		
	(e) Other minor produce	.....	4,518 4 1	4,518 4 1	4,518 4 1	.....	
	III.—Confiscated, drift and waif wood	.....	.....	.....	.....	.....	
	Total..	20 4 0	1,22,791 2 4	1,22,811 6 4	1,21,901 9 9	909 12 7	
Total Sind Circle.	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	319 6 2	96,584 14 5	96,904 4 7	96,064 0 9	840 3 10	
	(b) Firewood and charcoal	9,062 5 2	5,16,132 7 11	5,25,194 13 1	5,07,888 7 7	17,306 5 6	
	(e) Grass and other minor produce	.....	554 2 7	554 2 7	536 11 7	17 7 0	
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	6,730 7 2	6,730 7 2	6,722 7 2	8 0 0	
	(b) Firewood and charcoal	.....	41,527 7 3	41,527 7 3	41,527 7 3	.....	
	(d) Grazing and fodder grass	3 4 0	60,687 5 5	60,690 9 5	60,690 9 5	.....	
	(e) Other minor produce	.....	33,095 13 11	33,095 13 11	33,025 2 11	70 11 0	
	III.—Confiscated, drift and waif wood	.....	52 10 11	52 10 11	52 10 11	.....	
	Grand Total...	9,384 15 4	7,55,365 5 7	7,64,750 4 11	7,46,507 9 7	18,242 11 4	

* Rs. 17 written off, *vide* Government Resolution No. of

* Rs. 3 4 0 do. do. do.

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 63.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1892-93.

Divisions.	Particulars.	Outstandings at commencement of year.	Value of sales and other Revenue during year.	Total.	Amount realised during the year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Sukkur ...	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	44 6 2	18,825 14 2	18,870 4 4	18,870 4 4	.....	
	(b) Firewood and charcoal	7,155 0 4	1,69,953 3 8	1,77,108 4 0	1,76,243 11 4	864 8 8	
	(c) Grass and other minor produce	.....	12 8 0	12 8 0	12 8 0	.....	The outstanding under VC at the close of the year amounts to Rs. 63.
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	2,021 3 0	2,021 3 0	2,021 3 0	.....	
	(b) Firewood and charcoal	.....	23,971 1 9	23,971 1 9	23,971 1 9	.....	
	(d) Grazing and fodder grass	.....	16,909 4 8	16,909 4 8	16,909 4 8	.....	
	(e) Other minor produce	.....	1,388 6 0	1,388 6 0	1,353 10 0	54 12 0	
	III.—Confiscated drift and waif wood	.....	12 10 11	12 10 11	12 10 11	.....	
	Total...	7,199 6 6	2,33,094 4 2	2,40,293 10 8	2,39,374 6 0	919 4 8	
Naushahro	I.—Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	4,878 13 10	4,878 13 10	4,878 13 10	.....	
	(b) Firewood and charcoal	.....	93,235 0 6	93,235 0 6	93,053 0 6	182 0 0	The outstanding under VC at the close of the year amounts to Rs. 481-9-4.
	(c) Grass and other minor produce	.....	.....	.....	.....	.....	
	II.—Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	760 5 3	760 5 3	760 5 3	.....	
	(b) Firewood and charcoal	.....	3,363 10 6	3,363 10 6	3,363 10 6	.....	
	(d) Grazing and fodder grass	.....	9,254 15 0	9,254 15 0	9,254 15 0	.....	
	(e) Other minor produce	.....	2,750 0 0	2,750 0 0	2,750 0 0	.....	
	III.—Confiscated drift and waif wood	.....	.....	.....	.....	.....	
	Total...	.....	1,14,242 13 1	1,14,242 13 1	1,14,060 13 1	182 0 0	

Hyderabad	I.—Timber and other produce removed from the forests by Government agency—										
	(a) Timber	275	0	0	27,654	15	1	27,929	15	1	27,799	15	3	129	15	10	
	(b) Firewood and charcoal	1,890	4	10	1,33,634	5	7	1,35,524	10	5	1,33,414	7	6	2,110	2	11	
	(c) Grass and other minor produce	.....			523	15	7	523	15	7	523	15	7	.....			
	II.—Timber and other produce removed from the forests by consumers or purchasers—																
	(a) Timber	.....			2,273	12	9	2,273	12	9	2,273	12	9	.....			
	(b) Firewood and charcoal	.....			4,485	5	2	4,485	5	2	4,485	5	2	.....			
	(d) Grazing and fodder grass	.....			10,585	11	0	10,585	11	0	10,585	11	0	.....			
	(e) Other minor produce	.....			18,110	0	10	18,110	0	10	18,110	0	10	.....			
	III.—Confiscated drift and waifwood	.....			.....			.....			.....			.....			
	Total...	2,165	4	10	1,97,268	2	0	1,99,433	6	10	1,97,193	4	1	2,240	2	9	
• Jerruck ...	I.—Timber and other produce removed from the forests by Government agency—																
	(a) Timber	.....			32,322	11	7	32,322	11	7	32,322	11	7	.....			
	(b) Firewood and charcoal	17	0	0	53,865	1	10	53,882	1	10	53,745	1	10	120	0	0	
											* *17*	*0*	*0*				
	(c) Grass and other minor produce	.....			0	4	0	0	4	0	0	4	0	.....			
	II.—Timber and other produce removed from the forests by consumers or purchasers—																
	(a) Timber	.....			774	9	3	774	9	3	774	9	3	.....			
	(b) Firewood	.....			554	0	6	554	0	6	554	0	6	.....			
	(d) Grazing and fodder grass	3	4	0	12,220	1	6	12,223	5	6	12,220	1	6	.....			
											* *3*	*4*	*0*				
	(e) Other minor produce	.....			2,476	0	1	2,476	0	1	2,476	0	1	.....			
	III.—Confiscated drift and waif wood	.....			.....			.....			.....			.....			
	Total...	20	4	0	1,02,212	12	9	1,02,233	0	9	1,02,113	0	9	120	0	0	
Total Sind Circle ...	I.—Timber and other produce removed from the forests by Government agency—																
	(a) Timber	319	6	2	83,682	6	8	84,001	12	10	83,871	13	0	129	15	10	
	(b) Firewood and charcoal	9,062	5	2	4,50,687	11	7	4,59,750	0	9	4,56,473	5	2	3,276	11	7	
	(c) Grass and other minor produce	.....			536	11	7	536	11	7	536	11	7	.....			
	II.—Timber and other produce removed from the forests by consumers or purchasers—																
	(a) Timber	.....			5,829	14	3	5,829	14	3	5,829	14	3	.....			
	(b) Firewood	.....			32,374	1	11	32,374	1	11	32,374	1	11	.....			
	(d) Grazing and fodder	3	4	0	48,970	0	2	48,973	4	2	48,973	4	2	.....			
	(e) Other minor produce	.....			24,669	10	11	24,669	10	11	24,669	10	11	.....			
	III.—Confiscated drift and waif wood	.....			12	10	11	12	10	11	12	10	11	.....			
	Total...	9,384	15	4	6,46,763	4	0	6,56,148	3	4	6,52,741	7	11	3,406	11	5	

* Rs. 17 written off, *vide* Government Resolution No. of

* Rs. 3 4 0 do. do. do.

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM No. 64.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.

Outstandings and Liabilities on account of Contractors and Disbursers for the Year 1892-93.

Divisions.	Department Debtor.			Department Creditor.			Balance due		Remarks.
	At commencement of year 1892-93.	Recoveries in cash and value of supplies and work done during the year 1892-93.	At close of year 1892-93.	At commencement of year 1892-93.	Payments made during the year 1892-93.	At close of year 1892-93.	To Department (outstandings.)	By Department (liabilities.)	
Contractors.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Hyderabad	...	3,045 0 0	3,045 0 0	...	3,045 0 0	3,045 0 0	...	...	
Naushahro	...	220 0 0	220 0 0	...	820 0 0	820 0 0	600 0 0	...	
Sukkur	...	1,900 0 0	1,900 0 0	...	1,900 0 0	1,900 0 0	...	...	
Jerruck	...	26,000 9 0	26,000 9 0	2,800 0 0	23,500 9 0	26,300 9 0	300 0 0	...	
Total Contractors...	...	31,165 9 0	31,165 9 0	2,800 0 0	29,265 9 0	32,065 9 0	900 0 0	...	
Disbursers.									
Hyderabad	...	43,292 8 4	43,292 8 4	1,662 10 3	51,659 0 0	53,321 10 3	10,029 1 11	...	
Naushahro	...	21,457 0 4	21,457 0 4	126 4 0	33,122 1 8	33,248 5 8	11,791 5 4	...	
Sukkur	...	67,496 10 1	67,496 10 1	855 14 8	78,104 0 0	78,959 14 8	11,463 4 7	...	
Jerruck	...	17,679 13 0	17,679 13 0	4,348 3 11	18,230 3 0	22,578 6 11	4,898 9 11	...	
Total Disbursers...	...	1,49,925 15 9	1,49,925 15 9	6,993 0 10	1,81,115 4 8	1,88,108 5 6	38,182 5 9	...	
Grand Total...	...	1,81,091 8 9	1,81,091 8 9	9,793 0 10	2,10,380 13 8	2,20,173 14 6	39,082 5 9	...	

No. F. / 12950.

Forwarded to the Deputy Conservator of Forests, Sind Circle, under Section 267 of the Forest Department Code.

Accountant General's Office,
Bombay, 5th August 1893.

A. T. COX,
Accountant General, Bombay.

FORM No. 64.

FOREST DEPARTMENT, BOMBAY, SIND CIRCLE.

Outstandings and Liabilities on account of Contractors and Disbursers for the forest year extending from 1st April 1892 to 30th June 1893.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year 1892-93.	Recoveries in each and value of supplies and work done during Forest year.	At close of the Forest year 30th June 1893.	At commencement of year 1892-93.	Payments made during the Forest year	At close of the Forest year 30th June 1893.	To Department (outstandings).	By Department (liabilities).	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
CONTRACTORS.									
Hyderabad	.....	3,045 0 0	3,045 0 0	.....	3,045 0 0	3,045 0 0	.....	.....	
Naushahro	.....	820 0 0	820 0 0	.....	1,420 0 0	1,420 0 0	600 0 0	.....	
Sukkur	.....	1,900 0 0	1,900 0 0	.....	2,800 0 0	2,800 0 0	900 0 0	.....	
Jerruck	.....	26,000 9 0	26,000 9 0	2,800 0 0	39,985 10 0	42,785 10 0	16,785 1 0	.....	
	.....	31,765 9 0	31,765 9 0	2,800 0 0	47,250 10 0	50,050 10 0	18,285 1 0	.....	
DISBURSERS.									
Hyderabad	.....	59,394 12 4	59,394 12 4	1,662 10 3	74,937 3 8	76,599 13 11	17,205 1 7	.....	
Naushahro	.....	26,421 0 0	26,421 0 0	126 4 0	46,932 1 8	47,058 5 8	20,637 5 8	.....	
Sukkur	.....	75,074 0 8	75,074 0 8	855 14 8	1,18,899 0 0	1,19,754 14 8	44,680 14 0	.....	
Jerruck	.....	20,768 5 6	20,768 5 6	4,348 3 11	24,730 3 0	29,078 6 11	8,310 1 5	.....	
Total Disbursers...	.....	1,81,658 2 6	1,81,658 2 6	6,993 0 10	2,65,498 8 4	2,72,491 9 2	90,833 6 8	.....	
Grand Total...	.....	2,13,423 11 6	2,13,423 11 6	9,793 0 10	3,12,749 2 4	3,22,542 3 2	1,09,118 7 8	.....	

No. F. / 16,174

Forwarded to the Deputy Conservator of Forests, Sind Circle, under Section 237 of the Forest Department Code.

Accountant General's Office.
Bombay, 8th September 1893.

A. F. COX,
Accountant General, Bombay.

FORM No. 65.

FOREST DEPARTMENT, SIND CIRCLE.

Financial results of the Forest year 1892-93.

Divisions.	Timber and other produce removed from the Forests by Government Agency.		Other Revenue.		Formation, protection and improvement of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Sukkur	2,19,252	1,50,571	75,316	14,643	18,451	2,94,568	1,83,665	
Naushahro	1,05,532	79,376	35,776	9,892	10,639	1,41,308	99,907	
Hyderabad	1,79,242	1,36,458	50,828	10,104	17,615	2,30,070	1,64,177	
Jerruck	1,00,445	77,021	24,640	8,392	11,169	1,25,085	96,582	
Total... ...	6,04,471	4,43,426	1,86,560	43,031	57,874	7,91,031	5,44,331	

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

FORM NO. 65.

FOREST DEPARTMENT, SIND CIRCLE.

Financial result of the year 1892-93.

DIVISION.	Timber and other produce removed from the Forests by Government Agency.		Other Revenue.		Formation, protection and improvement of Forest.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Sukkur	1,95,126	1,39,868	54,888	11,956	15,106	2,50,014	1,66,930	
Naushahro	97,932	69,477	25,709	7,848	8,521	1,23,641	85,846	
Hyderabad	1,61,738	1,13,638	40,591	8,113	13,745	2,02,329	1,35,496	
Jerruck	86,068	62,528	19,171	6,151	8,302	1,05,239	76,981	
Total	5,40,864	3,85,511	1,40,359	34,068	45,674	6,81,223	4,65,253	

Hyderabad,
12th October 1893.

W. S. HEXTON,
Deputy Conservator of Forests, Sind Circle.

Forest Administration Reports of the Bombay Presidency, including Sind, for 1892-93.

No. 5385.

REVENUE DEPARTMENT.

Bombay Castle, 23*rd* June 1894.

Letter from the Deputy Conservator of Forests, Northern Circle, No. 2381, dated 20th January 1894—Submitting the Forest Administration Report of the Northern Circle for the forest year 1892-93, with its subsidiary statements.

Memorandum from the Commissioner, N. D., No. 297, dated 23rd January 1894—Forwarding the above.

Memorandum from the Commissioner, N. D., No. 504, dated 9th February 1894—Forwarding his remarks on the Forest Administration Report of the Northern Circle for 1892-93.

Letter from the Conservator of Forests, Central Circle, No. 4933, dated 8th January 1894—Submitting the Forest Administration Report of the Central Circle for the forest year 1892-93, together with its subsidiary statements.

Memorandum from the Commissioner, C. D., No. R.—283, dated 24th January 1894—Submitting with his remarks the Forest Administration Report of the Central Circle for 1892-93.

Letter from the Conservator of Forests, Southern Circle, No. 4758, dated 28th November 1893—Submitting the Forest Administration Report of the Southern Circle for 1892-93, together with its subsidiary statements; and making remarks.

Memorandum from the Commissioner, S. D., No. 5643, dated 28th December 1893—Forwarding, with his remarks, the Forest Administration Report of the Southern Circle for 1892-93.

Letter from the Deputy Conservator of Forests, Sind Circle, No. 2123, dated 12th October 1893—Submitting the Annual Administration Report of the Sind Forest Circle for the year 1892-93, with its subsidiary statements; and stating that Forms Nos. 54 and 55 will follow shortly.

Memorandum from the Commissioner in Sind, No. 4469, dated 12th November 1893—Submitting with his remarks the Forest Administration Report of the Sind Circle for 1892-93.

RESOLUTION.—In consequence of the change in the Forest year directed by the Government of India, the present reports cover a period of fifteen months, *viz.*, from 1st April 1892 to the 30th June 1893. An important administrative change was also effected in the course of the year 1892-93,—the old Northern Circle having been divided into two Circles corresponding with the Northern and Central Revenue Divisions. Of the two new Circles thus formed the portion falling within the Central Revenue Division remained in charge of the Honourable Mr. Shuttleworth, while the portion included within the Northern Revenue Division was placed in charge of Mr. F. R. Desai, 1st Grade Deputy Conservator of Forests. The tálukas comprised in the two forest divisions of the Thána Collectorate have also been redistributed during the year in order to equalise areas and facilitate inspection by the Divisional Officers. These two Divisions are now known as the Eastern and Western instead of the Southern and Northern Divisions. No change has been made in the limits of the Southern Circle which corresponds as before with the Southern Revenue Division.

2. The changes in area which have taken place during 1892-93 are as under:—

Circle.	Area on 1st April 1892.		Added.		Excluded.		Area on 30th June 1893.		Total Forest Area.
	Reserved.	Protected.	Reserved.	Protected.	Reserved.	Protected.	Reserved.	Protected.	
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Northern Circle ...	*†933 164/640	601 386/640	22 44/640	....	368/640	2 53/640	954 480/640	599 333/640	*1,554 173/640
Central Circle ...	5,711 605/640	190 100/640	20 584/640	....	9 93/640	177/640	5,723 456/640	189 563/640	5,913 379/640
Southern Circle ...	1,977 12/640	3,401 258/640	504/640	1 339/640	128/640	421/640	1,977 388/640	3,405 176/640	5,382 564/640
Sind Circle	986 600/640	‡5 32/640	7/640	....	11 558/640	..	975 49/640	‡5 32/640	910 81/640
Total ...	9,609 101/640	4,201 136/640	42 499/640	1 339/640	21 507/640	3 11/640	9,631 93/640	4,199 464/640	13,830 557/640

* Excludes the area of the leased forests in the Dangs which is given as 678½ square miles.

† This area has been taken from Form No. 46. The number given in paragraph 19 of Mr. Desai's report is 933 144/640 square miles.

‡ This includes 3 427/640 square miles in the Shahghardhandan Forest in the Sehwan Táluka which was omitted by the Deputy Conservator of Forests from former reports through an oversight.

In the Northern Circle $21\frac{455}{640}$ square miles were added to reserved forests in the Panch Mahâls, while 233 acres of reserved and 1,333 acres of protected forest were excluded as forming part of the Tansa Lake basin. In the Central Division considerable additions to the reserved area have been made in Khándesh and Sátára, while the changes in other Divisions have been unimportant, the net result being the addition to forest area of about 11 square miles. In the Southern Circle and in Sind the changes are insignificant.

3. No settlement work in respect of lands notified under section 34 of the Forest Act remains to be done in the Central Circle, but good progress was made in completing inquiries as regards provisionally notified lands in Khándesh, Ahmednagar, Poona and Sátára. Occupied lands aggregating 2,092 acres falling within the sanctioned projects were also acquired by purchase or exchange at very moderate rates in the four Divisions above named. But the area still to be acquired in Ahmednagar is very considerable and the Collector should be requested to give his early attention to the subject and report as to the prospects of securing the remaining land within a reasonable time. In the Northern Circle fair progress was made in settlement work and in the selection of lands for forests in the West Thána Division, and it is hoped that with the additional help of the Assistant Demarcation Officer appointed in June last, this important work will be shortly completed. In the Panch Mahâls also good progress has been made and the work brought nearly to completion. In East Thána the work of acquiring by purchase the occupied land falling within the catchment area of the Tansa Lake has been vigorously pushed on, and the result by which 4,314 acres have been acquired at an average rate of Rs. 6-8-0 per acre may be regarded as satisfactory. It appears from paragraph 36 of the report of the Deputy Conservator of Forests, N. C., that 364 square miles of forests were settled in that Circle during the year. The progress made in the settlement of areas notified under section 34 should, however, have been shown in the form prescribed by the Government of India and ordered by this Government to be adopted in Resolution No. 8738 of the 24th December 1887. This should be attended to in future reports. In the Southern Circle a large area of the Kánara Forests still remains to be settled. The outturn of the year's work appears satisfactory, making allowance for the fact that only one officer, Mr. Sheppard, could be spared for this duty. Mr. Wingate, however, rejoined at the close of the year and Government trust that most of the remaining work will be shortly completed. The interruption in Mr. Knight's tour in Dhárwár retarded the field work in that Division, but the remaining work should be completed, if possible, by the end of the current year. No steps appear to have been taken in Kolába during the year to complete the settlement of the old forests measuring $11\frac{3}{640}$ square miles contained in four villages of the Nágothna Táluka, and the Collector's attention should be directed to paragraph 7 of Government Resolution No. 4944 of the 8th July 1893. The necessity for increasing the forest area of the Sind Circle, in order to meet the growing demand for fuel in that province, has already been fully recognised. The special officer appointed for this purpose commenced work on the 23rd November 1892, but the progress made by him has not been reported.

4. The following table shows the results of the year's work in erecting special forest boundary marks and clearing boundary lines :—

Forest Circle.	Length in miles of boundary line cleared.	Cost of erecting cairns and stones.
	Sq. m.	Rs.
Northern Circle	181	5,527
Central Circle	1,730	11,082
Southern Circle ...	108 21	5,243

No details have been given for the Sind Circle. The importance of this work, with a view to prevent encroachments, and clearly define forest boundaries, appears to be well understood.

5. The progress made by the Forest Survey in the Northern and Central Circles appears satisfactory. It seems doubtful, however, whether it is worth while to expend so much labour and time on the minute survey of bábul reserves such as those described in paragraphs 37 to 39 of the Honourable Mr. Shuttleworth's report. Many of these reserves are narrow scattered fringes of bábul growth on the banks of rivers, with rugged and unsymmetrical boundaries. The cost of surveying such lands on the 16″ scale in Poona and Sholápur has amounted during the past season to about Rs. 190 per square mile. This appears excessive in proportion to the benefits to be derived from the survey, and the Conservator should be requested to submit a further report as to the necessity for continuing the work on the present scale in such localities. In the Southern Circle the results compare unfavourably with that of the past year both as to area and average cost per square mile. As regards the average cost, Government have in their Resolution No. 2801, dated 21st April 1894, already given instructions that in all reports and returns dealing with the work of Forest Survey Parties in Kánara an explanation should be given showing how much of the cost is necessitated by topographical work as distinguished from that incurred solely for the purposes of the Forest Survey proper.

6. The operations of the Working Plans Office, N. C., were confined during the year to the two Forest Divisions of Thána. In all 317 compartments were actually laid out as against 341 in the preceding year at the same average cost per acre. The system first adopted in Thána and based on area alone, subject to sylvicultural rules regulating the reservation of certain trees, has now been in force for some years and continues in favour as the one best suited to meet local requirements and preserve the source of supply. By taking area as the primary factor instead of volume the necessity of elaborate enumeration survey is avoided and much time as well as expense is saved. Doubts were at first entertained as to the sufficiency of this system. It is, however, gratifying to Government to find from the Review of the Inspector General on the Forest Administration of British India for the year 1891-92 (paragraph 7) that a practically identical system is now recommended for adoption in Assam.

In the Central Circle the Divisional Forest Officers have commenced the work of differentiating blocks and compartments, but they have been unable to do much more than lay out the boundaries on the ground of the compartments selected for exploitation during the year. The recent appointment of a special Working Plans Officer for this Circle will no doubt result in considerable progress being made in this direction.

In the Southern Circle working plans have been prepared for 78,317 acres only, but even these were not finally revised at the close of the year of report. Data have, however, been collected for other plans in course of preparation and it is expected that next year's report will show a decided advance as compared with the past. The Conservator, S. C., should be requested to submit a special report describing concisely the system which is being adopted in that Circle. It would appear from the reports that it is considered necessary to enumerate and classify trees in test plots so as to determine the average per acre and the size of compartments. If this be the case Government will be glad to know the reasons which in Mr. MacGregor's opinion necessitate so elaborate and laborious a system and what practical difficulty there is in basing the working plans on area alone.

The introduction of a stricter system in Sind of cutting by compartments according to a fixed plan of operations appears to have been attended with some difficulties except in Hyderabad where the working plan has been in operation for some years. Contractors and wood cutters who have been accustomed in the past to cut indiscriminately according to their own convenience will no doubt readily adapt themselves to the change, provided sufficient firmness is shown by the Forest officials.

7. The following table shows the number and result of prosecutions for forest offences in the years 1891-92 and 1892-93. In comparing the returns

it has to be remembered that the figures for the latter year cover a period of fifteen months:—

Circle.	1891-92.		1892-93.		Percentage of failures.	
	Prosecutions.	Acquittals.	Prosecutions.	Acquittals.	1891-92.	1892-93.
Northern Circle	336	54	234	62	16·07	26·5
Central Circle	926	220	1,402	393	23·75	28·03
Southern Circle	252	56	575	137	22	23·8
Sind Circle	35	14	50	25	40	50
Total ...	1,549	344	2,261	617	22·20	27·28

8. The percentage of failures is higher in all the Circles than in the preceding year and notably so in the case of the Northern Circle and Sind. The reasons given for this result are various. Different Magistrates hold different views as to the gravity of offences against Forest law and as to the nature and amount of evidence sufficient to justify convictions in such cases. The result may be due, as Mr. Sinclair surmises in the case of Thána, to greater care on the part of Magistrates in weighing evidence rather than to any difference in departmental methods of procedure. There appears, however, to be on the whole a prevailing disposition on the part of the Magistracy to treat forest offences leniently. It is the policy of Government to prevent forest restrictions from becoming harassing so far as is possible with due regard to the paramount importance of preserving the sources of supply. Leniency in dealing with breaches of Forest law is proper in the case of first offences and petty and isolated pilfering for personal use. It may also be proper when restrictions necessitating sudden changes in the daily habits of the people have been recently introduced and are imperfectly understood. But leniency is misplaced and destroys the deterrent effect of criminal prosecutions when forest depredations, however trivial they may appear when considered as individual and isolated acts, have become in any locality, in spite of repeated warnings, systematic and persistent.

9. In the Northern Circle there was a large decrease in the number of cases sent for trial. This result would be satisfactory if it indicated a real decrease in the number of offences committed. Unfortunately, however, there has been a large increase in the number of undetected offences in this Circle, *viz.* 782 as against 587, and this failure to detect offences, assuming that the officials concerned have performed their duty to the best of their ability, suggests a doubt as to whether the protective agency is sufficiently strong to cope with the work required of it. The offences in the Northern Circle were, however, mostly of a petty character, and it is at least satisfactory to observe that systematic depredation on a large scale is now of rare occurrence. Temptation to wholesale illicit cutting for trade purposes has no doubt in recent years been greatly lessened owing to the regular working of the forests and the abundant supplies of timber and firewood now obtainable at moderate rates, both for export and local supply, from the numerous compartment fellings. These fellings are now so widely distributed in Thána that there is perhaps no longer any reason for continuing the privileges of collection of dead wood. The system is admittedly open to gross abuse and can only be justified under special circumstances, where its withdrawal would cause serious hardship and inconvenience. The Collector should, however, be requested to submit a separate report on the subject.

10. In the Central Circle the number of cases sent for trial exceeded those sent in the corresponding period of the previous year by 251 (—1,177 as against 926). The increase was in great part due to the larger number of prosecutions in Poona, owing to cattle trespass cases being sent for trial to Magistrates instead of being compounded. The case referred to by the Conservator, in which from 500 to 900 acres of forest were cut and burnt for *dalki* cultivation in the Koli villages of Nigdole, Kandvál and Terangaon, appears to have been a serious one, and the result of the inquiry by the Collector into the causes which led to it should be reported to Government.

11. Prosecutions in the Southern Circle were also more numerous than in the preceding year, the increase occurring chiefly in Kánara and Belgaum, and being due to numerous prosecutions for petty pilfering in the former and illicit grazing in closed areas in the latter district.

12. The number of cases sent for trial in Sind was as usual insignificant. It is to be regretted that the remarks of the Commissioner in Sind in paragraph 6 of his review on the report for 1891-92 should have been misunderstood by any of the Divisional Forest Officers. Mr. Hexton's interpretation of the remarks is correct and the terms in which he addressed the officer who declined to prosecute in the case which formed the subject of the misunderstanding have the full approval of Government.

13. The number of cases compounded under section 67 of the Forest Act and the amounts paid as compensation in 1891-92 and 1892-93 are shown below :—

Circle.	1891-92. Cases compounded. For misappropriation of (a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	For (d) Other Offences.	Total.	Number of cases in which compensation was accepted.	Amount realized.
							Rs. a. p.
Northern Circle ...	Old Northern Circle. Not given	Not given.	Not given.	Not given.	502		
	1,210	1,254	215	9,648		11,812	30,413 11 6
Central Circle ...	Not given	Not given.	Not given.	Not given.	11,825		
Southern Circle ...	Not given ...	Not given ...	Not given ...	Not given ...	804	*803	2,216 0 0
Sind Circle	Not given ...	Not given ...	Not given ...	29	2,752	2,720	3,418 0 0
Total ...	.....	.....	.....	.....	15,883	15,335	36,047 11 6

Circle.	1892-93. Cases compounded. For misappropriation of (a) Timber.	(b) Firewood.	(c) Minor Forest Produce.	For (d) Other Offences.	Total.	Number of cases in which compensation was accepted.	Amount realized.
							Rs. a. p.
Northern Circle ...	199	93	59	68	419	419	1,025 3 1
Central Circle	830	925	147	7,745	9,647	9,647	27,019 0 0
Southern Circle ...	Not given ...	Not given ...	Not given ...	Not given ...	916	†909	2,579 0 0
Sind Circle	Not given ...	Not given ...	Not given ...	21	2,427	2,427	3,085 0 0
Total ...	.....	.....	.....	.....	13,409	13,402	33,708 3 1

* For misappropriation of—
Timber... 325
Firewood 277
Minor forest produce. 121
For other offences ... 80
Total ... 803

† For misappropriation of—
Timber... 293
Firewood 464
Minor Forest Produce. 93
For other offences ... 59
Total ... 909

14. The general decrease in the number of compounded cases is satisfactory, there having been 13,412 cases in the 15 months of 1892-93 as against 15,335 in the 12 months of the preceding year. There is an apparent increase in the Southern Circle of 106 cases (909 as against 803). But if one-fifth of the cases for 1892-93 are deducted as falling within the extra period of three

months covered by the report the total will be reduced to 724 as against 803. The decrease is apparently due in part to the fact that the Forest Officers in more than one Division have read the orders of Government as a direction to abstain from compounding altogether. This of course was not intended. But the difficulties with which the question is beset must be admitted, and the reports submitted, read with the remarks of the District Officers, seem to indicate that allowance being made for these difficulties, the warnings given by Government against free and indiscriminate recourse to the powers conferred by section 67 of the Forest Act have not been without effect, and that more discretion has been exercised in dealing with these cases than in former years. The decrease in both Divisions of Khándesh is particularly noticeable, as is also the comparatively small number of cases which have occurred in the important Forest Divisions of Kánara. Belgaum and Bijápur are the only Divisions in which an appreciable increase has taken place. The increase in the former district is, however, fully explained in paragraph 85 of Mr. McGregor's report, and as regards the latter district Government must accept the opinion of the Collector that there is no ground for complaint as to the working of this section of the Act. The increase in the Jerruck Division of Sind should have been explained and Mr. Hexton should in future attend to the directions regarding the classification of compounded cases given in Government Resolution No. 7232 of 12th September 1892.

15. Fire protection has received due attention in all the Forest Circles. The system of reporting each forest fire to the Collector and thus ensuring the co-operation of the Revenue Officers and villagers, recently introduced by Mr. Sinclair in Thána and now adopted in other Circles, has already borne good fruit and may be expected to lead to still greater improvement, when it becomes firmly established. The percentage of forest area burnt in Thána is now inconsiderable and special credit is due to Mr. Millett in West Thána for the excellent fire discipline maintained by him. Owing to the unreliability of the figures of area given in last year's reports it is probable that the real improvement in fire protection in the Northern Circle is much more marked than appears from the comparative table given in paragraph 86 of the Conservator's report. A similar improvement is shown by the returns of the remaining three Circles. The percentage of area burnt in the Central Circle has been reduced from 17·02 to 8·8 notwithstanding the fact that the fifteen months covered by the report include two hot seasons. It is to be noted, however, that the season from November 1892 to June 1893 was, owing to frequent falls of rain, specially favourable for fire protection. The area placed under protection in the Southern Circle was considerably increased, and the number of failures was substantially less. The marked success of the operations in Ratnágiri is no doubt rightly attributed to the absence of any demand for grazing in the forests. In Sind also fires are reported to have been fewer and less disastrous than in former years. On the whole there appears to be satisfactory evidence that greater vigilance has been shown by the Forest officials both in preventing and extinguishing forest fires, and that the help of the Revenue officers and villagers has been more freely given and has been of especial value in tracing the causes of fires.

16. The number of animals impounded during the year for trespass in closed forests and grazing without fees in open forest, as compared with the past year, is shown below :—

Circle.	For trespass in closed area.		For grazing in open area without passes.		Total under both heads.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Northern Circle...	2,734	4,011	1,922	2,266	4,656	6,277
Central Circle ...	199,521	240,128	135,119	142,331	334,640	382,459
Southern Circle...	4,283	2,789	4,443	3,976	8,726	6,765
Sind Circle ...	10,981	15,988	12,861	9,869	23,842	25,857
Total ...	217,519	262,916	154,345	158,442	371,864	421,358

17. Taking into account the longer period covered by the present reports the figures show a decrease in the number of cattle impounded in all but the Northern Circle. The total number of cases in the latter Circle is not, however, excessive and the increase in East Thána is partially explained by the additional facilities given by the erection of new pounds in localities beyond the reach of existing ones. It is observed, however, that trespasses in closed areas, which are more serious offences and cause more injury to forests than grazing without passes in open areas, form a large proportion of the total number of cases in all the Circles. Where cases of the first class are numerous there must usually be laxity on the part of the protective establishments. Where grazing without passes in open areas is carried on the responsibility must rest to a great extent on the village officers for not strictly complying with the rules, and any tendency on the part of these officials to encourage the practice should be severely checked. There is an apparent increase from 334,640 to 332,459 in the number of cattle impounded in the Central Circle, but allowing for the additional period dealt with there seems, as the Commissioner observes, to be "a decided improvement in the direction of less infringement of the law." In several of the Divisions of this Circle the proportion of sheep and goats to other animals impounded is very large. This is specially the case in Poona, Ahmednagar, Sátára and Násik, and in the latter Division 2,500 sheep and goats, the property of foreign graziers, are reported to have been caught in closed areas by the forest subordinates and villagers and impounded in one night. The large increase in the number of cattle impounded in the Poona Division, *viz.*, 61,153 as against 45,668 in the preceding year, has not been sufficiently explained. In paragraph 13 of his review on the Annual Administration Reports of the Poona District, the Commissioner stated that the working of the grazing rules in Poona, including the impounding of cattle, would be dealt with in reviewing the Forest Administration Report of that Division. As the subject has not been noticed by the Commissioner in forwarding the report of the Conservator, C. C., a further and special report dealing with the matters in question should now be submitted.

18. The decrease in impoundings in Khándesh demands special notice. The number of cases in the two Divisions compares with the figures of the preceding year as follows :—

	1891-92.			1892-93.		
	Closed area.	Open area.	Total.	Closed area.	Open area.	Total.
East Khándesh	12,456	20,226	32,682	9,258	8,195	17,453
West Khándesh	19,342	5,158	24,500	15,802	6,506	22,308

The total for West Khándesh in 1890-91 was 45,821.

There has, as noticed in paragraph 14 above, been a large decrease also in the number of cases compounded in Khándesh, under section 67 of the Act. This result, so far as it indicates that there has been a real decrease in the number of forest offences generally and that cattle owners have learnt to respect the difference between closed and open forests, and have realised that it is better to pay grazing fees as regards the open areas once for all at the beginning of the season than pay them later in addition to pound fees and other penalties, is clearly satisfactory.

It is observed, however, that the Collector has in his administration report for the past year explained the decrease in the number of compounded cases as resulting from the discontinuance of the practice of levying damages in cattle trespass cases, and this explanation coupled with the coincident decrease in the number of cattle impounded seems to suggest the inference that the orders of Government may have been misunderstood, and that cases of cattle trespass may have been let off not merely without payment of compensation but without pounding. Before, therefore, expressing unreserved satisfaction with the results

above shown Government desire to be informed of the number of cattle found trespassing whose owners have been let off altogether as well as of the number impounded, with a brief classification of the reasons for the leniency shown.

19. Attention was called in paragraph 19 of Government Resolution No. 4944 of 8th July 1893 to the importance of fencing valuable closed areas liable to inroads of cattle. In the Central Circle an expenditure of Rs. 6,721 was incurred in purchasing wire fencing for use during the ensuing year and attempts have been made to protect exploited coupes and plantations by fences constructed from the crown branches of felled trees, as well as by wire fencing in specially selected places. Elsewhere little, if any, progress in this direction appears to have been made. Government trust that the matter will not be lost sight of. Fencing appears to be the only effectual remedy against cattle trespass, and while wire fencing on a large scale may be impracticable on account of the cost Government consider that serious efforts should be made to introduce live fences as part of the ordinary cultural operations of the Department.

20. The year has been generally favourable for rapid natural reproduction and it is satisfactory to find that in spite of fires and cattle trespass "a dense crop of promising mixed forests" is now to be seen in a good many of the compartments of the Thána Forests cut in the earlier years of the working plan rotation. Natural reproduction in Sind is said to be checked in some parts by the flow of water being stopped by protective river embankments, and the complaint is repeated that areas which were once good forest and grazing lands are rapidly drying up. This, as the Commissioner remarks, is inevitable, and the only remedy is to gradually replace the exhausted inland forests by acquiring fresh lands on the banks of the river and inside the embankments.

Cultural operations by forest guards in the Central Circle, where indeed they are most needed, appear to have been carried out with commendable energy and considerable success.

21. The receipts from grazing fees and sales of fodder grass compare with those of the preceding year as follows:—

Circle.	Amount.	
	1891-92.	1892-93.
	Rs.	Rs.
Northern Circle ... ... } Old Northern Circle.	4,35,923	26,152
Central Circle ... ... }		*3,92,140
Southern Circle	91,487	*1,22,100
Sind Circle	59,000	*60,690
Total ...	5,86,410	6,01,082

* These figures are inclusive of the outstandings of collections of the previous year.

22. The receipts from free grazing in the Northern Circle have fallen off considerably in each Division. The decrease in East Thána is said to be "probably due to village officers having put too liberal an interpretation on the term 'free cattle.'" This presumably means that cattle which are not the *bonâ fide* agricultural cattle of forest villages have been allowed free grazing instead of grazing at privileged rates. But the matter should have been more clearly explained. In the Central Circle also the village officers in Ahmednagar are said to be neglectful of their duties in seeing that village cattle owners who habitually graze their animals in the forests take out grazing permits, while those in Poona and Sátára are said to be too liberal in differentiating the free and paying cattle, to be backward in issuing permits to village cattle owners and to connive with the latter in defrauding the grazing revenues. The Commissioner has made no comments on these remarks in forwarding the report. His attention should now be called to them, and the Collectors of the districts named above should be requested to take measures to have the lists prepared by the village officers carefully scrutinized.

23. Receipts from *hirdas* show a falling off in all three Circles of the Presidency proper, the decrease being attributed to a poor crop and low prices,

and in some cases to pilfering, while in Thána the concession to occupants of all but the reserved kinds of trees in their lands has been a further cause of decline. The arrangements made in the Northern Circle for carrying out the instructions in Government Resolution No. 9846 of 15th December 1892 as to the principles on which the collection and disposal of minor forest produce should be regulated, appear satisfactory.

24. The number of unsold coupes in the Thána District, *viz.* 59 out of 284, was unusually large; and of this number 4 only were felled departmentally, as it was found that the local supply of branchwood for râb could be met from other sources. The unsold compartments are mostly, it is understood, in the Váda, Mokháda and Sháhápur ranges, and the reason for their not being sold or felled departmentally is in some cases their inaccessibility and the consequent difficulty of bringing the produce to market, and in others the poor material contained in them. These reasons must be accepted. It is hoped that it will be possible to open out the East Thána forests by degrees by improvement of communications. But as Mr. Reid observes the timber of this tract must always remain at a disadvantage, as compared with West Thána, in the absence of facilities of transport by water and rail. The expectation that new markets will be found for the produce of the Panch Mahâls forests, owing to the opening of the Godhra-Rutlam Railway, will, it is hoped, be realised.

25. The financial results of the year's operations, as compared with the previous year, are shown in the following table:—

Circle.	Receipts.		Expenditure.		Net Revenue.		Increase or Decrease of net Revenue in
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1892-93.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ..	6,14,271 } 13,62,732	6,35,449	2,43,195 } 7,18,493	2,69,287	3,71,076 } 6,44,239	3,66,162	—4,914
Central Circle ...	7,48,154 }	8,23,495	4,74,677 }	5,87,992	2,73,477 }	2,35,503	—37,974
Southern Circle ...	11,47,707	12,01,085	7,05,231	6,74,597	4,42,476	5,26,488	+84,012
Sind Circle	7,74,210	7,91,031	5,01,936	5,44,331	2,72,274	2,46,700	—25,574
Total ...	32,84,342	34,51,060	19,25,039	20,76,207	13,59,303	13,74,853	+15,550

26. The decrease in the net revenue of the Northern Circle (Rs. 4,914) is inconsiderable, and is due in great part to increased but necessary expenditure on the acquisition of lands for forests. The receipts are more than those of the preceding year by Rs. 21,177, although the revenue from minor forest produce fell considerably owing to the limitation of collection to articles for which a trade demand exists or is likely to be created, and to the comparative failure of the myrobalan crop.

27. Receipts in the Central Circle increased by about three-fourths of a lákh, but on the other hand expenditure both on conservancy and works and on establishment rose by Rs. 1,13,315, resulting in a decrease of net revenue of Rs. 37,974. In making this comparison, however, it has to be remembered that the figures for 1892-93 include the receipts and expenditure of fifteen months, and while the receipts of April, May and June of 1893 amounted to Rs. 71,708 only, this being the time of the year when least revenue is received, the expenditure during the same period was Rs. 1,05,513. The increase in expenditure over that incurred in the past year is explained to be due to felling operations on a larger scale in some Divisions and to the increased rates of salaries drawn under the re-organisation scheme for the upper controlling branches of the department with effect from the opening of the year. The suggestion of the Commissioner, C. D., in the concluding sentence of paragraph 13 of his forwarding memorandum that the receipts, expenditure and net revenue for the past ten years should be shown for the Circle as it is now constituted, should be adopted in next year's report.

28. The receipts and net revenue of the Southern Circle were larger by Rs. 53,378 and Rs. 84,012 respectively than in the preceding year. This result

is on the whole satisfactory and is due to a more favourable market for timber felled departmentally in the Northern Division of Kánara and in Kolába. On the other hand the revenue from *hirdas* as in the other Circles showed a considerable decline, and there was a decrease in the yield of large teak in Kánara, the falling off being attributed to bad agricultural seasons and consequent stagnation of trade and to the competition of Burma teak bought by the Southern Marátha Railway. Expenditure on establishments increased from Rs. 2,67,816 to Rs. 2,85,773 for the reasons given in the preceding paragraph. On the other hand the charges for conservancy and works were less by Rs. 48,591, owing chiefly to no new contracts in North Kánara having been given during the year to bring in wood to the depôt, there being large stocks in hand from the previous year. The increased demand for blackwood for export is noticeable and if maintained is likely to bring in a considerable revenue, as the supply is said to be large while the local demand is insignificant.

28. In Sind the financial results have not been satisfactory. The receipts for the fifteen months covered by the report show an increase of Rs. 16,821 as compared with the preceding twelve months, and the expenditure an increase of Rs. 42,395, resulting in a decrease of Rs. 25,574 net revenue. Taking the figures of the financial year only, receipts have fallen by Rs. 92,987 and net revenue by Rs. 56,304. The year, however, is reported to have been a very unfortunate one for forest operations. An abnormal rainfall was succeeded by heavy floods, making exploitation impossible till the end of October, while work had to cease earlier than usual in the river side forests owing to the river rising a month earlier than usual. Labour is also said to have been scarce owing to cholera.

29. Government acknowledge with pleasure the efficient manner in which the Conservators and Deputy Conservators in charge of Circles have discharged their duties and observe with especial satisfaction the remarks of the Honourable Mr. Shuttleworth and Mr. Desai as to the cordial assistance rendered by the Revenue officers of their Circles: and as to the harmony and good feeling which marks the relations of the Revenue and Forest Officers.

30. The errors and discrepancies which have been discovered in scrutinising the reports under review have been noted in the accompanying appendix.

G. W. VIDAL,
Acting Chief Secretary to Government.

To

The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors, including the Collectors and Deputy Commissioners in Sind,
The Conservators of Forests, Central and Southern Circles,
The Deputy Conservators of Forests, Northern and Sind Circles,
The Survey Commissioner and Director of Land Records and Agriculture,
The Accountant General,
The Judicial Department of the Secretariat,
The Public Works Department of the Secretariat.
} With copies of the report.

The Secretary of State,
The Government of India,
} by letter.

The Editors' Tables, Bombay and Poona.

No. of 1894.

Copy forwarded for information and guidance to

APPENDIX REFERRED TO IN PARAGRAPH 30 OF GOVERNMENT RESOLUTION, No. 5385, DATED 23rd JUNE 1894.

Northern Circle.

The area of Reserved Forest on the 1st April 1892 in the Northern Circle is shown in paragraph 19 of the report for the Northern Circle as $933\frac{144}{640}$ square miles, whereas that shown in Form No. 46 appended to the report is $933\frac{164}{640}$ square miles.

The area of Reserved Forest on 30th June 1893 is shown in the same paragraph as $954\frac{477}{640}$ square miles, whereas in Form No. 46 the area is shown to be $954\frac{480}{640}$ square miles.

The area of land shown in paragraph 19 of the report as excluded from Protected Forest in the East Thána Division as it formed part of the Tánsa lake basin is 1,331 acres, whereas in the table embodied in that paragraph and in Form No. 46A it is given as $2\frac{53}{640}$ square miles and 1,333 acres respectively.

The legally constituted forest area in East Thána on 1st April 1892 as given in paragraph 20 is $589\frac{207}{640}$ square miles, whereas according to Forms 46 and 46A it is $589\frac{337}{640}$ square miles.

The forest areas on 30th June 1893 in Thána and the Panch Maháls as given in paragraph 20 differ as shown below from those given in paragraph 38 of the report and in Forms 46 and 46A :—

Division.	Area as shown in paragraph 20.	Area as shown in paragraph 38.	Area as shown in Forms 46 and 46A.
	Sq. Miles.	Sq. Miles.	Sq. Miles.
East Thána	$678\frac{288}{640}$	$587\frac{50}{640}$	$587\frac{51}{640}$
West Thána	$588\frac{147}{640}$	$679\frac{385}{640}$	$679\frac{384}{640}$
Panch Maháls	$218\frac{633}{640}$	$333\frac{455}{640}$	$218\frac{636}{640}$

In paragraph 32 the forest area in West Thána over which the Forest Settlement Officer's proceedings extended during the year is shown as $141\frac{348}{640}$ square miles, but in Form No. 47 the area taken in hand during the year is shown as 199 square miles.

Compensation for land and rights as shown in paragraph 33 is Rs. 28,540, whereas that shown in Form No. 61 is Rs. 30,553.

The expenditure on burning fire lines during 1892-93 as given in paragraph 96 is Rs. 3,791, whereas in Form No. 53 the amount shown is Rs. 3,683.

In the table incorporated in paragraph 146 the number of animals licensed for grazing during the year 1892-93 is shown in the column of amount of fees paid during 1891-92 and *vice versâ*. The amount of fees paid during 1892-93, is shown in the same table as Rs. 10,319, while in Form No. 55 it is shown as Rs. 10,314-5-6.

The figures given in Chapter IV (Financial Results) do not agreee with those in Forms Nos. 61 and 65, the former being apparently for the financial year 1892-93, while the latter are for the forest year from 1st April 1892 to 30th June 1893, but this should have been explained.

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Central Circle.

The amounts for compensation for land and rights paid in the Poona and Sátára Districts as shown in paragraph 24 are Rs. 40 and Rs. 10 respectively, while those shown in Form No. 61 are Rs. 173-7-0 and Rs. 135 respectively.

According to the table in paragraph 58 the number of prosecutions during 1892-93 in the Poona District was 543, but in the 4th line of page 16 of the report the number is shown as 549.

The amount of timber in the rough exploited departmentally during 1892-93 is given in paragraph 164 as 315,356 cubic feet and in Form No. 59 as 315,336 cubic feet.

The expenditure on public works in West Khándesh and in Poona is shown in paragraph 55 as Rs. 1,559-14-5 and Rs. 20 respectively, but that shown in Form No. 51 is Rs. 1,567 and Rs. 28 respectively.

The figure 1,663 entered in the last column against Sholápur in the table embodied in paragraph 61 should be 1,668.

The departmental collection of hirda nuts in the Poona District during 1892-93 was 3 khandis, 3 maunds, 16 lbs. according to Form 58, but in paragraph 175 it is shown as nil. In the same paragraph 265 khandis are shown as the quantity of hirda departmentally collected in Poona during 1891-92, but in the report for that year this quantity was shown as having been removed by purchasers.

In paragraph 161 it is stated that the revenue derived from rosha oil amounted to Rs. 15,098-14-6, but the amount shown in Form No. 58 is Rs. 14,668. The value of hirda nuts sold in the Ahmednagar District and the quantity of these nuts brought into the Poona Forest Depôts are stated in paragraph 162 to be respectively Rs. 745-11-0 and 169 khandis 16 maunds 2 lbs., but the figures according to Form 58 are Rs. 784 and 65 khandis 19 maunds 7 lbs. respectively.

The total receipts and expenditure of the Northern and Central Circles for 1891-92 as shown in the reports for 1892-93 do not tally with the corresponding figures of the old Northern Circle for 1891-92 as given in the report for that year.

Southern Circle.

Expenditure on the well at Kolikeri is shown in paragraph 65 as Rs. 384 and in Form No. 51 as Rs. 348.

In paragraphs 183 and 187 the yield of myrabolams in the Kánara and Belgaum Districts during 1892-93 is shown to be 2,319 and 2,751 khandis respectively, while in Form 58 the figures given are 2,355 and 2,891 khandis respectively.

In paragraph 188 the number of bámbus removed from depôts in the Belgaum District during 1892-93 is shown as 678,467, whereas the number given in Form 57 is 678,517.